Lectures

ON

THE DIAGNOSIS AND TREATMENT OF THE PRINCIPAL FORMS OF PARALYSIS OF THE LOWER EXTREMITIES.

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LECTURE IV.—(PART IV.)

GENERAL CONCLUSIONS OF THE COURSE.

Distribution of the various forms of paraplegia into two or three groups, according to the symptoms.—Paraplegia with an increased amount of blood in the spinal cord or its membranes.—Paraplegia with an insufficient amount of blood in the spinal cord.—Remarks on the remedies and other means of treatment which produce a diminution or an increase of the amount of blood, or a change in the nutrition of the spinal cord, or the absorption of effused fluids.—General conclusions concerning the diagnosis and treatment of the various kinds of paraplegia.

ANYONE who will take the trouble of reading the preceding review of the principal symptoms which may coexist with paraplegia* will at once find that a broad line of demarcation may be traced between the most frequent forms of paraplegia. In the various cases in which there is an increase in the amount of blood in the spinal cord or its membranes, (myelitis, meningitis, or simple congestion,) symptoms appear which clearly indicate that there is such an increase. These symptoms are the consequence of an irritation of a part of the spinal cord, or of the roots of some of the spinal nerves. They may be classified as follows:—

1st. *Symptoms of irritation of motor nerve-fibres*—i. e., convulsions, cramps, twitchings, erection of the penis, &c.

2ndly. *Symptoms of irritation of sensitive nerve-fibres*—i. e., *referred sensations*, such as formication, itching, pricking and other pains, abnormal feelings of cold or heat, of tightness, pressure, &c.

3rdly. *Symptoms of irritation of vaso-motor or nutritive nerve-fibres*—i. e., diminution of temperature of the paralysed limbs, wasting of muscles, œdema, bed-sores, alkalinity of urine, &c.

Cases of paraplegia in which the nutrition of the spinal cord or the amount of blood in the vertebral canal is diminished are characterized by the absence of the above symptoms. Such is the paraplegia caused by the white or non-inflammatory softening of the spinal cord; such is also, generally, the reflex paraplegia.†

There are, therefore, two distinct groups of cases of paraplegia: one characterized by symptoms of irritation of the various kinds of nerve-fibres existing in the spinal cord or the roots of its nerves; and another characterized by the absence of these symptoms. Most of the cases of paraplegia belong to one or the other of these groups. But there are some cases, such as those caused by a hæmorrhage or a tumour, which may form a third group, in which the symptoms of irritation may be almost entirely absent, or in which only some of these symptoms exist, and with peculiar features, as we have already shown.‡

Leaving aside this third group of cases of paraplegia, the treatment of which has been indicated in the beginning of this Lecture, we find that most cases of this form of paralysis may be ranged into two groups—1st, cases in which there are symptoms of irritation, with an increased amount of blood in the spinal cord or its membranes; 2nd, cases in which there is an insufficiency of nutrition, and most frequently an insufficiency in the amount of blood in the spinal cord, and also no symptoms of irritation. This division leads to the establishment of the following rules of treatment:—

1st. In those cases of paraplegia in which there are symptoms of irritation, employ those means of treatment that diminish the amount of blood in the vertebral canal.

2nd. In those cases of paraplegia in which there are no symptoms of irritation, employ those means of treatment which increase nutrition and the amount of blood in the spinal cord.

We are now led to examine by what means these two effects may be obtained—i. e., to increase or diminish the amount of blood or the nutrition of the spinal cord. With these rules in view, we will say a few words on each of the various means of treatment that are known to have been employed successfully in cases of paraplegia.

1. *Belladonna.*—This most powerful remedy has been employed quite blindly in the various forms of paraplegia by French and Italian physicians. The *rationale* of its mode of action is generally so little known, that it is often prescribed in those cases in which, instead of being useful, it increases the paralysis. An eminent author of a very learned work on Therapeutics and Pharmacology declares that "It is quite obvious that it (belladonna) should never be employed in cases dependant on congestion, inflammation, or organic lesion of the nervous centres, until this condition shall have ceased entirely, and nothing left but inertness." The truth is, that it is precisely in cases of congestion or inflammation of the spinal cord or of its membranes that belladonna should be used against paralysis. The mistake made by this most able writer depends in a measure upon the general but erroneous opinion that belladonna is a stimulant of the nervous centres. We will not speak here of its action on the brain; but as regards the spinal cord and the spinal nerves, belladonna, far from being a stimulant, acts in diminishing the vital properties of these organs. As we have already said,* belladonna is a powerful excitant of bloodvessels, and especially of those of the spinal cord and its membranes. In consequence of this influence, it diminishes the amount of blood in the vertebral canal, and in so doing produces a relative diminution of the vital properties of the spinal cord and its nerves. It is, therefore, in those cases in which these vital properties are increased that belladonna should be employed. We will sum up the indications to use or to avoid belladonna in saying:—

1st. Belladonna is one of the most powerful and reliable remedies that we may employ, in cases of paraplegia with symptoms of irritation of the motor, sensitive, and vaso-motor or nutritive nerve-fibres of the spinal cord, or of the roots of its nerves; in other words, in cases of congestion, meningitis, or myelitis.

2nd. Belladonna is a most dangerous agent, able only to increase the paralysis, if employed in cases of paraplegia without symptoms of irritation, such as cases of white softening, or of the reflex paraplegia.†

2. *Ergot of Rye.*—This powerful remedy has also been employed quite blindly, although its mode of action being better known than that of belladonna, it would have been easier to discern in what cases of paraplegia it is able to be of benefit. Ergot, like belladonna, produces a contraction in the bloodvessels of the spinal cord and its membranes, and, therefore, diminishes the amount of blood circulating in these organs. The following is a summary of the indications and contra-indications to its use:—

1st. Ergot must be employed in cases of paraplegia with irritation of motor, sensitive, or vaso-motor nerves—i. e., in congestion or inflammation of the spinal cord or its meninges.

2nd. Ergot must be avoided as an agent only able to increase the paralysis in cases of paraplegia without symptoms of irritation, such as cases of the reflex paraplegia, or of non-inflammatory softening of the spinal cord.

3. *Strychnine.*—This most powerful remedy is also employed indiscriminately. I know of a large number of patients whose paralysis has been increased by the influence of this medicine. Its mode of action, as we have shown in Lectures II. and III.,

* See Part III. of this Lecture, THE LANCET, Nov. 10th.

† We think it may be necessary to repeat here that some symptoms of irritation (twitchings, extreme coldness of the feet, &c.) may occur by a *reflex action* in the reflex paraplegia.

‡ See the beginning of this Lecture: "Hæmorrhage in the cord and in its membranes; tumour upon or in the spinal cord." THE LANCET, Sept. 8th, and Oct. 20th.

* See Lecture II., treatment of the reflex paraplegia; and Lecture III. treatment of myelitis, meningitis, and congestion of the spinal cord and its meninges.

† We have pointed out the only exception to the above rule in the part of Lecture II. that relates to the treatment of the reflex paraplegia.

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consists in increasing the amount of blood in the spinal cord and its membranes, and, as a consequence, in increasing the vital properties of that nervous centre. Therefore—

1st. Strychnine ought to be employed in those cases of paraplegia in which there is no sign of irritation, or of increase of the vital properties of the spinal cord, such as the cases of reflex paraplegia and of white softening of the spinal cord.

2nd. Strychnine ought to be avoided as a most dangerous poison in those cases of paraplegia in which there are signs of congestion or inflammation of the spinal cord or its meninges. In those cases strychnine can only increase the cause of the paralysis.

4. *Sulphur.*—The *modus agendi* of this medicine in paraplegia is not well known, but it is at any rate certain that sulphur may be employed with advantage in cases of reflex paraplegia or white softening of the spinal cord, in which there is no irritation of this nervous centre. My own experience confirms the assertions of Graves in that respect.

5. *Phosphorus.*—The mode of action of phosphorus is still less known than that of sulphur. German physicians have successfully made use of this agent in paraplegia, probably in cases of insufficiency in the amount of blood in the spinal cord. We must say, however, that we have tried it without any benefit in two cases of white softening of the spinal cord.

6. *Mercury.*—No agent has been more extensively and more blindly used than mercury in cases of paraplegia. It is only in cases with an increased amount of blood in the spinal cord or its meninges that mercury may be used with advantage. Its depressing influence, however, is such that I never employ it except in cases of syphilitic paraplegia. It is decidedly injurious in cases of white softening of the spinal cord, and also in cases of reflex paraplegia.

7. *Iodide of potassium.*—This remedy is not sufficiently employed in paralysis. It is one of the most powerful agents of absorption of fluids effused in the cranio-vertebral cavity, either out of or in the substance of the nervous centres. It is the only known remedy that may be employed without danger in the various forms of paraplegia. It is especially useful in cases of white softening of the spinal cord, due to the fatty degeneration of the bloodvessels of that organ. It has, more than mercury, the power of producing the absorption of effused fluids in the vertebral canal, and it is decidedly less depressing than mercury. In cases of syphilitic paraplegia its curative influence is sometimes very rapid.

8. *Cantharides.*—This is another remedy, the mode of action of which is ignored, and which is employed blindly in any form of paraplegia. I have tried it without any apparent benefit in cases of paraplegia belonging to the two most distinct forms of this affection—i. e., a case of white softening of the spinal cord, and a case of chronic meningitis. It seems, however, to have been useful in some cases of chronic myelitis.

9. *Stramonium, Hyoscyamus, and Indian Hemp.*—These agents act more or less like belladonna and ergot of rye on the bloodvessels of the spinal cord, and they are, therefore, to be used in those cases of paraplegia in which the amount of blood is increased in that organ. Of course they must be avoided in cases of white softening or of reflex paraplegia. Against insomnia in cases of paraplegia with symptoms of irritation of the spinal cord, hyoscyamus or Indian hemp ought to be employed, instead of opium, the use of which is then dangerous, as it produces a congestion of the spinal cord.

10. *Ammonia, Sulphate of Quinine, and Iron.*—These medicinal agents are sometimes of great service in paraplegia. It is chiefly in cases of insufficiency in the amount of blood and in the nutrition of the spinal cord that they are to be employed; but they may be also used with benefit in cases of chronic myelitis or meningitis, or of spinal congestion, when the symptoms of irritation are not violent, if the pulse is weak and slow.

11. *Cod-liver Oil.*—Some cases of paraplegia have been reported in which cod-liver oil seems to have produced a very great amelioration. We have never employed it alone; but a notable amelioration has taken place in some cases of chronic myelitis in which we have employed cod-liver oil with belladonna and ergot of rye. In two of these cases, the patients had been treated for five or six weeks without amelioration by belladonna and ergot, and they began to get better only when cod-liver oil was added to the treatment.

12. *Bleeding and Cupping.*—The chronic inflammation of the spinal cord or its meninges does not require bleeding. Except in one case, we have never seen any decided good effect produced by bleeding in cases of paraplegia owing to chronic inflammation or to congestion. We hardly need say that any loss of blood might prove most injurious in cases of paraplegia in which there is a diminution in the amount of blood in the spinal cord or of the nutrition of that organ, as in cases of white softening or of reflex paraplegia. Dry cupping frequently applied to the spine is an excellent means of treatment in those cases in which there is either an inflammation or a congestion in the spinal cord or its membranes. It would rather be injurious than useful in cases of white softening or of reflex paraplegia.

13. *Blister, Moxa, Issue, Actual Cautery, &c.*—Revulsion, by these various means, is, to say the least, useless in cases of white softening of the spinal cord and of the reflex paraplegia. But these various means are often of great service in cases of myelitis or meningitis, especially when the inflammation is limited to a small extent in the length of the cord or its membranes.

14. *Cold and Hot Douche.*—The hot douche (at about 100°), applied *loco dolente* on the spine, is very useful in cases of inflammation or congestion, and useless, if not hurtful, in cases of reflex paraplegia and of white softening. As regards the cold douche, the cold shower-bath, sponging with cold water, &c., they are certainly most beneficial in cases of white softening, or in the reflex paraplegia.

From the above review of the various means of treatment of paraplegia, it results—

1st. That in cases of paralysis of the lower limbs, with symptoms of irritation of the motor, sensitive, and vaso-motor nerve-fibres of the spinal cord or of the roots of its nerves, the proper treatment consists in the use of some of the following agents or means:—Belladonna, ergot of rye, hyoscyamus, stramonium, Indian hemp, dry cupping. blisters, moxæ, issues, the hot douche, and also sometimes the iodide of potassium, ammonia, sulphate of quinine, iron, or cod-liver oil.

2nd. That in cases of paraplegia without symptoms of irritation of the spinal cord or the roots of its nerves, the rational treatment consists in the use of strychnine, sulphur, the cold douche or shower-bath, and also of the iodide of potassium, and frequently ammonia, quinine, and iron.

As regards the principal, I might say the essential, agents to be employed against paraplegia, I can now repeat what I have so often said in these lectures, that it is of the utmost importance in the treatment of this affection not to make use of strychnine, belladonna, mercury, &c., before having ascertained positively whether there are or not symptoms of irritation of the spinal cord. Giving strychnine indiscriminately in all cases of paraplegia, as is done by so many practitioners, is a very dangerous mode of proceeding, as it may increase notably the disease to which the paralysis is due. The same thing may be said of the indiscriminate use of mercury, belladonna, cantharides, ergot, &c.

We will not say more here as regards the treatment of the various forms of paraplegia, as we have already discussed at length, in the beginning of this lecture and in the two preceding, the means of improving the nutrition of the spinal cord, of preventing the alterations of nutrition in the paralysed limbs, in the bladder, &c., and also of diminishing the external irritation in cases of reflex paraplegia.

General Conclusions of the Course.

Our principal object in these lectures has been to show—

1st. That there is a form of paralysis of the lower limbs entirely distinct from all others, as proved by its mode of production, by morbid anatomy, by its symptoms, and by the influence of a certain mode of treatment, and that this form of paralysis fully deserves the name of reflex paraplegia.

2nd. That the reflex paraplegia may be caused by the most various irritations of the skin, the mucous and serous membranes, the abdominal or thoracic viscera, as well as of the genital organs or the trunks of the spinal nerves.

3rd. That most cases of paraplegia can be placed in two groups, entirely different one from the other, according to the existence or the absence of symptoms of irritation of the motor, sensitive, and vaso-motor nerve-fibres.

4th. That most of the therapeutical means to be employed in paraplegia are also to be grouped in two categories, one of which is fitted to those cases in which there are symptoms of irritation, and the other to those cases in which these symptoms do not exist.

CLIMATE OF PEKIN.—Sir John Herschel states that in the climate of Pekin the winters are, on an average, ten degrees colder, and the summers nineteen degrees warmer, than in London. The annual amount of rain is about one-twelfth greater. The temperature of solar exposure is of course very great in summer.

Lettsomian Lectures

ON

CERTAIN POINTS CONNECTED WITH DIABETES.

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LECTURE III.—(PART I.)

THE gluco-genic theory has had its adversaries, but none have founded their opposition upon grounds in any way approaching those brought forward in my last lecture. M. Schmidt, in 1850, compared sugar with urea, and thought it took origin in the blood without any special organ to form it. M. Figuier stated that there was no sugar in animals unless introduced from without by a saccharine or amylaceous alimentation. In the case of the carnivora, he said, the flesh coming from the vegetable feeder contained sugar. Again, he considered that sugar, instead of being formed by the liver, was merely stored up by this organ, and was carried to it in the portal blood. The reason he gave for no sugar being detected in the portal blood was, that some unknown matter existed there, which masked its presence. Such statements as these have been satisfactorily shown by Bernard to be contrary to the results of observation, and the attack of M. Figuier ended by strengthening rather than otherwise the position of the gluco-genic theory. More recently, M. Sanson has followed in much the same direction as that taken by M. Figuier. He considers that there is only one source for the sugar met with in the animal economy, and that this one source is exterior to the body; that the glycogène, or sugar-forming substance of Bernard, is nothing but dextrine, which, he says, does not belong specially to the liver, but is found in the blood and the various textures of the body; that the liver is not an organ for producing the glycogène, but simply for abstracting it from the blood, and transforming it into sugar with greater activity than is elsewhere effected. Bernard's experiments, he considers, prove only that sugar is absent in the blood going to the liver, and present in that coming from it; and not that the change of glycogène into sugar is the result of a process of secretion. He looks upon it as a simple chemical change, because it also takes place after death.

The question as to the possession of a gluco-genic function by the liver, is one of the utmost importance regarded in connexion with diabetes. Unless our physiology of the subject is established upon a correct footing, I do not see how any real advance can be made in the pathology of it. It is true the cause of diabetes might be, perchance, discovered; but unless our knowledge of what naturally takes place is correct, we cannot, I say, expect to have any accurate idea of the manner in which the effect is produced. For this reason I have not hesitated to enter as fully as I have done into a discussion regarding gluco-genesis. The facts I have revealed have thoroughly satisfied my own mind; and I cannot do otherwise than think that the present gluco-genic theory must be, sooner or later, abandoned. The theory, in fact, is founded upon the condition of the liver and blood, discoverable by an ordinary examination after death. But the result of such an examination I have shown not to be in accordance with the ante-mortem or physiological state. It must, therefore, be discarded from our consideration in forming a notion of what occurs during life.

Briefly to consider them, these are the grounds that have led me to deprive the liver of the special sugar-secreting function which has lately been attributed to it. The organ itself is found free from sugar, or at the most is only impregnated with it to the minutest extent, when treated so as to come down upon it in a condition the nearest possible to that of life. The blood, under normal circumstances, merely contains more or less evident traces of sugar; and the blood in different parts of the system does not present, as far as I can discover after adopting the necessary precautions in the examination, any appreciable variation in constitution. In some recent most carefully conducted examinations, I have been unable to distinguish, by any difference in behaviour, the blood of the portal vein from that of the right side of the heart. I have sought for, but have been unable to obtain, evidence of the susceptibility of sugar to undergo destruction, to any extent, in the circulation. The result of my experience decidedly is, that if sugar escape from the liver, it is to be detected alike in every part of the circulation; and there is never any extent of sugar in the blood without its being immediately drawn upon and separated by the kidneys. This being the case, the object of sugar formation becomes a most fruitless one; and it is not, I think, to be conceded as probable that the liver should produce it for the kidneys afterwards to get rid of it.

It is possible that, without being susceptible of appreciation by our tests, there may be a slight amount of transformation of sugar into lactic acid going forward in the blood as it is circulating through the different parts of the system; for if saccharine blood be allowed to decompose, the sugar, when decomposition has fully set in, gradually disappears, and the blood becomes acid, which is the reverse of what takes place when a specimen has been taken that is free from sugar. The changes of decomposition, I apprehend, have excited the lactic acid fermentation precisely as in the case of milk that has turned sour. Now, I see no reason, although I can bring forward no actual proof in support of it, why the changes going on in the blood during its circuit through the body may not act in the same way as the changes of decomposition, and occasion a slow production of lactic acid from the traces of sugar that I have mentioned as being found in every part of the circulation. Whatever, however, may occur of this kind, must be of an exceedingly trifling nature, for the disappearance of sugar is not to be detected in any particular portion of the system by a difference in behaviour of the blood.

To proceed with the arguments that oppose the gluco-genic theory: We have evidence that the so-called gluco-genic matter is actually formed in the liver from sugar as one of its sources. Now, if sugar were its natural destination, the process would be sugar into glycogène, and glycogène back again into sugar—a repetition that certainly appears upon the face of it to be extraordinary and improbable as a designed occurrence of nature.

Again, if there were the constant production and flow of sugar from the liver through the hepatic veins, as is implied under the gluco-genic doctrine, on interrupting the principal stream of blood through the organ, it ought certainly to be expected that less sugar should escape, and less sugar be found in the circulatory system. Yet, as the result of actual experiment, precisely the reverse is the case. A ligature applied to the portal vein causes the blood circulating through the system to present a strongly saccharine character. Notwithstanding the current is so reduced which is supposed to be naturally carrying sugar into the general circulation as a part of a particular functional operation, the amount of sugar now reaching the circulating current is actually very greatly increased. The fact appears to me to be, that the ligature of the portal vein places the liver in an unnatural condition; its functional working does not proceed, with a supply only of arterial blood, in the manner it does when there is also the stream of portal blood to exercise its influence. As the result of this, the hepatine descends into sugar, like it does under many other unnatural states of the liver.

Ligature of the hepatic artery as well as the portal vein causes the liver to become strongly impregnated with sugar during life, as is the case with ligature of the portal vein only; but the blood belonging to the general circulation remains uninfluenced. The flow of blood through the liver being entirely prevented, no opportunity is afforded for the passage of the sugar into the system.

If I have concluded, as my experiments have led me to do, that sugar is not the natural product—that sugar is not specially intended to be formed as the result of the natural transformation of hepatine in the liver, it may reasonably be inquired of me, what is the material into which the hepatine is really destined to be transformed? It is generally more easy to say what the nature of a particular operation does not, than to pronounce what it does consist of, when our knowledge regarding it has not been completely made out. I do not wish, however, to avoid this question; indeed, I have it constantly before me. But, as I am not in a position to give what I consider a sufficiently satisfactory solution at present, I must content myself by saying, that I have grounds for believing that the product of the normal transformation of hepatine, instead of escaping through the hepatic veins into the circulation, passes down through the biliary passages into the intes-

tine. I am actively engaged in working out the connexion of the liver with the production of fat—a statement that may serve to give a hint of the direction in which my views are tending with regard to the object of hepatine.

In some other parts of the body besides the liver, there is to be found a material which has characters identical with hepatine. Now, if hepatine give rise to sugar in one situation, why should it not do so in others? and why should there not be in the muscles and the cells of the cutaneous, intestinal, respiratory, and genito-urinary surfaces of the fœtus, and in the muscles and lungs of the adult, a gluco-genic function?

It is not necessary that the liver should enjoy a special sugar-forming function to account for the presence of that minute trace of sugar which is met with under natural circumstances in the circulation. The production of sugar may result from the operation of a chemical tendency which hepatine happens to possess, and which appears to have no connexion with its physiological destination. When chemistry alone comes into play, as after death, the tendency of hepatine to undergo a saccharine metamorphosis is allowed to take effect; but normally, during life, this mode of transformation is held in check by a force or condition peculiar to the living and healthy liver. There is the material which is so susceptible of undergoing change into sugar, and there is, also, the ferment or agent for exciting it. Both are present in the liver, and yet the process escapes being carried out, except to the most infinitesimal extent. Although I cannot precisely account for this, nevertheless the fact remains the same; and we are not altogether unprepared for it, as we have long been familiar with a parallel in the phenomenon of the coagulation of the blood. Whilst circulating in the living body, the fibrine exists in a fluid state, but with an astonishing rapidity assumes the solid form after the blood is withdrawn. It is the property of fibrine to have a strong tendency to coagulate. As long as it remains under natural circumstances in the living body, this tendency is held in check, but immediately it escapes from the influences thus naturally controlling it, its coagulating property comes into play, and a solidification is the result. Even here, although the phenomenon has been so long familiar to us, it has not yet received what can be considered as a satisfactory and sufficient explanation. There is, then, nothing supernaturally wonderful, nothing unparalleled, in the position of hepatine before and after death—namely, as to its resisting during life the exercise of its chemical tendency to transform into sugar, and a transformation taking place immediately the controlling influence of life is removed.

I imagine that under the existence of natural circumstances the circulation takes place through the liver without disturbing the hepatine contained in the hepatic cells further than just the minutest trace of it passing into the bloodvessels, and thus accounting for the trace of sugar constantly met with in the different parts of the circulatory system. Hepatine cannot be mixed with the blood without being transformed into sugar. The blood, whether circulating in the body, or experimented with out of the body, acts like saliva as an energetic ferment in converting hepatine into sugar. The injection of hepatine into the circulation of the living animal occasions a saccharine state of the blood, and if enough have been employed, the urine is also impregnated with sugar. This is shown by the specimen of urine before me, derived from a rabbit, in which fifty grains of hepatine were introduced into the jugular vein. It gives the characteristic orange-yellow reaction with the copper solution. Hence it is only necessary for hepatine to pass from the liver cells into the blood, and a saccharine state of this fluid is the immediate result.

The consideration has not been overlooked, that although the quantity of sugar found in the blood of the right side of the heart is extremely small, yet, supposing this small quantity to be constantly escaping from the liver, it would form a considerable amount in the course of the twelve or twenty-four hours. The sugar, however, small in quantity as it is in right-ventricular blood, has not just been poured into the circulation from the liver. It must be remembered that the blood flowing towards the heart through the general systemic veins, contains sugar, and, as far as I can learn from the reaction of our tests, to about the same extent as the cardiac blood itself. So that sugar once in the circulation circulates over and over again, and it would be an error to calculate, from the amount found in the heart and the quantity of blood passing through the liver, the extent of sugar production in a given time. Even, as I have stated, the blood before entering the liver is charged with sugar, and in experiments, where the greatest care has been exercised, where every precaution has been taken to obtain the specimens in the state naturally belonging to life, there has been no appreciable difference of reaction discoverable between the portal and cardiac blood.

It is interesting to notice how hepatine, in the feeble property of diffusibility it enjoys, presents us with an exemplification of the harmonious adaptation that exists in the exercise of the operations of nature. Looking at the hepatine as contained in the hepatic cells, and reflecting on the close proximity that the blood must hold to it in circulating through the liver, it may be reasonably inquired how it is that the hepatine does not pass, as it might be expected to do, by diffusion into the bloodvessels—a circumstance that would conduce to render the blood extensively saccharine. Now, it happens, as I have discovered, and as can be seen by the experiment before me, that hepatine is the antithesis to sugar as regards extent of diffusibility. If sugar were contained in the liver cells, the circulation could not take place through the organ without largely carrying it away, on account of its being so readily diffusible through membranous septa. With hepatine, on the other hand, there is a resistance to traverse animal membranes. A solution of sugar and hepatine placed together on one side of an animal membrane in an endosmotic apparatus, the sugar diffuses, leaving the hepatine behind. I have even found that under the pressure of a six-feet column of fluid, hepatine has resisted passage through the pores of a piece of bladder. It is on account of this low diffusibility, I presume, that we experience the difficulty we do in filtering a solution of hepatine. The coarse pores of an ordinary filter seem, indeed, to offer some amount of obstruction to the passage of this principle. That hepatine *can* pass, however, through a membranous septum is, I think, sufficiently proved by the fact, that in injecting a stream of water through the vessels of the liver, the hepatine is gradually washed out. Under this operation the liver becomes unusually swollen and œdematous, and its cells must be submitted to a great amount of pressure.

Albumen is another material which, like hepatine, enjoys a low diffusibility. When a solution of it is submitted to experiment, it does not pass through a membrane, such as a piece of bladder, except under the influence of pressure. With a column of fluid, three feet high, the albumen passes, but not at all when there is no pressure employed. This property of albumen is doubtless connected with its retention in the bloodvessels. It is not intended that a material so necessary as a pabulum for the nutrition of the body, should have a tendency, like urea and sugar, to escape from the blood by virtue of the simple physical property of diffusibility. For a corresponding reason, I apprehend, hepatine agrees with albumen, and is not endowed with a tendency to diffuse, because it is not intended to be drawn by the blood out of the hepatic cells.

Looking, then, to this physical character which hepatine possesses, I think it must be admitted that the explanation is clear, why, under natural circumstances, it resists, as it does, transudation into the circulating current, where, being transformed into sugar, it would prove, if not entirely, certainly in great part, useless to the system; for, as I have before pointed out, sugar cannot exist to any notable extent in the blood without being recognisably eliminated by the kidneys. I should say even, that the trace of sugar which is natural to the blood throughout the body, is constantly being drawn upon by the kidney; but that the amount for removal is so small, that it is not susceptible of detection in the urine. Did we possess more perfect means of detection than we do, I imagine a minute trace of sugar would be reckoned as a normal constituent of the urine. I am speaking now a little problematically, but what I have said accords with a principle that is being forcibly recognised in analytical chemistry—namely, that the minuteness of diffusion of materials through the different constituents of the universe exceeds or surpasses our powers of detection.

That hepatine can, under certain circumstances, pass from the liver into the bloodvessels, has been proved by what I mentioned to be the effect of injecting a stream of water through the organ after death. Now, may it not be that we have here an illustration of the manner in which saccharine urine is occasioned in some instances? Violent muscular efforts, by which the liver is compressed—and obstruction to the breathing, by which the circulation is interfered with and congestion produced—will occasion a highly saccharine state of the blood. In the case of the latter, by keeping up the respiratory disturbance I have rendered the urine strongly saccharine. Both disturbances, as far as the liver is concerned, are of a physical character; and is it not purely to physical circumstances that the unnatural condition observed is attributable? When the liver is compressed, a favourable condition is established for promoting the escape of hepatine; and when it is congested, the hepatic cells being, I conceive, sub-

mitted to compression, the condition will, in a similar manner, be favourable to a transudation of hepatine, and its admixture with the blood. In the human subject, saccharine urine has been noticed in cases attended with an obstruction to the flow of blood towards the heart. For example, it has been observed in whooping-cough, coma, and pneumonia; and I look upon it here as entirely referable to a physical alteration of the conditions in the liver. In whooping-cough, the protracted paroxysms of coughing not only occasion a great amount of venous congestion, as is indicated by the countenance of the patient, but the liver must, at the same time, be compressed externally by the violent action of the abdominal muscles. In coma, with stertorous breathing, the impediment to the circulation of blood through the lungs produces general congestion of the system, and in this the vessels of the liver must participate. A case of this kind only recently fell under my notice. A man, one of the carpenters of our hospital, suddenly fell down in the street in a fit of apoplexy. As there was great lividity of the face, with slow, stertorous breathing, I suggested, about eighteen hours after the fit had occurred, that the urine should be tested for sugar. It was highly albuminous, and gave, after the albumen had been coagulated and separated, a copious reaction with the copper solution. There was no evidence that this person had saccharine urine previous to the occurrence of his apoplexy. In pneumonia, where a large portion of the lung is rapidly involved, the patient is likely to suffer from great dyspnœa; and thus, through the circulation being influenced, saccharine urine may be occasioned at the commencement of the disease.

After division of the pneumogastrics in the lower animals, I have often observed the production of saccharine urine. It depends upon the activity of the respiratory function being so diminished as to offer an impediment to the natural flow of blood through the system; and it is only where this is prominently the case that sugar is to be recognised in the urine.

ON

CONGENITAL DISLOCATIONS OF THE HIP.

BY HOLMES COOTE, ESQ., F.R.C.S.,

ASSISTANT-SURGEON TO ST. BARTHOLOMEW'S HOSPITAL AND TO THE ROYAL ORTHOPÆDIC HOSPITAL.

CONGENITAL dislocations at the hip-joint have of late years occupied so much attention, and been the subject of so many curative efforts, that a general account of the anatomical peculiarities of such cases must be both interesting and instructive, and this information is the more desirable because it has been affirmed that the joint is commonly found perfect in form, although the component pieces are separated, and that attempts to re-approximate the articular surfaces are indicated and have been successful.

We must be most careful in admitting such evidence; for many cases have been included under the head of "congenital dislocations of the hip," which have no right to be so denominated. It requires a practised eye and hand to detect with certainty every form of hip accident in the adult. How much more so must it be in the young; how easily may it be overlooked in the infant.

Much valuable information on this subject has been collected by Dr. Gurlt, of Berlin. He remarks that in the majority of cases the head of the femur is thrown upwards on the dorsum ilii, sometimes upwards and outwards. The dislocation may be complete or incomplete, single or double; whether it is single or double depends on the changes of form in the pelvis. Congenital dislocations are often combined with other malformations.—(Beiträge zur Vergl. Pathol. Anatomie der Gelenkkrankheiten, s. 455.)

In children who have not yet learnt to walk, we find in these cases that the head of the femur is either completely absent, and supplied by a flat surface lying on the trochanter, (Vrolik, "Tabulæ ad Illustrandam Embryogenesin," s. 106, tab. 84, figs. 1 and 2;) or the head of the bone is deformed and flattened in those spots where it comes into abnormal contact with the ilium, (Parise, "Archiv. Génér. de Médecine," ser. 3, t. xiv., 1842, p. 446.) The cartilaginous covering is irregular, and of different thickness. The changes in the acetabulum depend on whether the dislocation is complete or incomplete. In the former case, the acetabulum is either normal or flatter than natural; the flattening is remarkable when the head of the femur is deficient, (Paletta, "Exercitationes Patholog.," s. 171, p. 90.) In the latter, the rim of the acetabulum is compressed where the head of the femur rests against it, (Parise, op. cit.) In some cases, the fatty tissue in the acetabulum is hypertrophied, (Paletta, op. cit.) In others, the joint is distended with synovia, (Parise, op. cit.) The capsule is mostly normal, though occasionally distended by an increase in the quantity of synovia. The ligamentum teres is almost always present in infants, and elongated and thinned, but sometimes thicker than natural, (Parise, Vrolik, op. cit.) The formation of a new joint is always incomplete. Tourtnal relates the particulars of a case of dislocation downwards and inwards, ("Ueber Angeborene Abweichungen in der Contiguität des Knochensystems," Münster, 1834, s. 9.)

In older children, who have learnt to walk and have sustained the weight of the body, the head of the femur is flattened and deformed, as above stated, but also small, and little developed; the neck of the femur is shorter than normal, and altered in direction—i. e., more horizontal; the acetabulum is flatter and smaller, and full of fat. The want of relation between the acetabulum and head of the femur is more marked, and the former is no longer fit to receive the latter. (Vrolik, "Essai sur les Effets Produits," &c., s. 454.) The capsule is generally thickened, but capacious, covers the head of the femur, and allows of some movement. The ligamentum teres is mostly present, but elongated and flattened. In some cases, fragments of it alone remain adherent to the femur. The formation of a new joint is very incomplete; the impression on the ilium is faint. In most cases, the thickened capsule has to bear the weight of the body, as the bones are scarcely in steady apposition. (*Vide* Gurlt's "Beiträge zur Pathol. Anatomie Gelenk-krankheiten.") The direction of the pelvis is more oblique than natural. When both bones are dislocated there is anterior curvature of the spine; when only one, the spine is curved laterally, and the vertebræ are rotated.

Although I have not yet met with a case in which this deformity could be rectified, still it is pleasing to know that patients may gain the power of walking freely, and that the spinal curvature may be lessened by proper apparatus.

New Bridge-street, Dec. 1860.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

WESTMINSTER HOSPITAL.

INJURY TO THE JEJUNUM FROM A CONTUSION; SUBSEQUENT RUPTURE AND FATAL PERITONITIS ON THE FIFTH DAY.

(Under the care of Mr. HOLT.)

THE three cases which we now record in our "Mirror" are examples of the most serious form of injury to the bowels, for the integrity of their structure was invaded, so that an escape of fæcal matter took place into the peritoneum, which was fatal. In the first two, the mischief arose from violence; and in the third, from the impaction of a bone. In that which immediately follows, it is most probable that the rupture of the bowel was not immediate, but that the bruise by the saddle was so severe at the point of rupture that the intestine was unable to recover itself, and hence the occurrence of fæcal extravasation some time after the injury was received. For the notes of the case we are indebted to Mr. W. B. Slayter, house-surgeon to the hospital.

D. W——, aged forty, a mounted rifleman, admitted June 23rd, about eight o'clock P.M., under the care of Mr. Holt. It was stated by his friends that they were returning with him

from the review in Hyde-park, and that when crossing Westminster-bridge his horse slipped, and being pulled up suddenly reared and fell back, the back of the saddle striking Mr. W—— in the abdomen. He tried to get from under the horse as well as he could; but it fell on him three times. He was immediately carried to the Westminster Hospital, but with a little assistance he walked up the steps of the institution. When the house-surgeon saw him, he was lying on his back on the couch in the surgery, with his thighs flexed on his abdomen; the face was very pale, and the countenance anxious; the pulse rapid, and but little symptom of collapse present. The patient complained of extreme pain over the region of the bladder, extending up to the right hypochondriac region. The slightest motion greatly increased the pain; but pressure on the part did not materially affect it. He was immediately put into bed, when it was found he could not pass his urine, and when he tried to do so it caused him a great deal of pain. A catheter was immediately passed, when a fair quantity of urine was drawn off, and there was no blood mixed with it. The legs, especially the right, could not be extended without causing him much pain. The right limb was also considerably contused, but there was no sign of fracture. On examination, a large contusion was found over the pubis, extending into both iliac regions. He was ordered thirty minims of the sedative liquor of opium, in camphor mixture, at once. At ten P.M., he seemed much about the same; pulse 100; pain slightly relieved, although excruciating if he attempted to move. The patient was seen by Mr. Hillman, who ordered warm fomentations to the abdomen.

June 24th.—One A.M.: No better; ordered turpentine stupes to the abdomen, and ten grains of the compound soap pill.—Five A.M.: Slightly relieved.—Eight A.M.: Mr. Hayter, the house-surgeon, was called by the nurse, who stated he was much worse. The recti muscles were found to be extremely rigid, and he was suffering very much from pain. To have an injection of a drachm of tincture of opium, also five grains of the compound soap pill every four hours.—One P.M.: He was seen by Mr. Holt, who drew off a good quantity of urine. The bowels have not acted since his admission. Ordered, beef-tea and brandy, and to continue the opium.—Four P.M.: The urine again drawn off; feels very easy; pulse 104.—Seven P.M.: Complains of great pain all over the abdomen, especially in the right hypochondriac region; pain increased by pressure. A poultice, sprinkled with tincture of opium, was applied, and he was to take ten grains of the compound soap pill at once.—Half-past eight P.M.: Feels easy; has had some sleep.

25th.—Nine A.M.: Has passed a comfortable night; pulse 104; respirations 24.—One P.M.: Feels very easy. To continue the opium every six hours.

26th.—Nine A.M.: Has had a very easy night; can pass his urine. The bowels have not acted since his admission.—Eight P.M.: Complains of great pain all over the abdomen, still most severe in the right hypochondriac region, and extending down to the right iliac region; excessive straining; quick pulse; anxious countenance.—Nine P.M.: Great prostration; the straining has ceased, but there is still great pain, increased by pressure; stercoraceous vomiting; pulse 145; respirations 32. Brandy and chloric ether administered in small quantities every ten minutes.

27th.—Nine A.M.: Still complains of pain. Ordered to continue the opium.—Twelve A.M.: Has had a slight motion, which relieved him very much; the vomiting has stopped.—Four P.M.: The vomiting has come on again. To have half a grain of powdered opium, and one minim of creasote, in pill, every five hours.—Six P.M.: The vomiting slightly relieved.—Twelve P.M.: He is sinking very rapidly; pulse cannot be counted; respirations 42.

28th.—He died at one A.M. He was insensible about half an hour before death.

Post-mortem appearances.—Externally there was a contusion extending from one iliac region to the other, together with ecchymosis of the scrotum. On opening the cavity of the abdomen, a large quantity of feculent matter was seen, and the peritoneum was extensively inflamed, and covered with patches of lymph. The large omentum was gangrenous, especially on the right side, and was firmly adherent to the intestine. In the upper part and on the free border of the jejunum, about a foot from the duodenum, a small circular opening, about as large as a threepenny-piece, was observed. It was ragged at the edges, and surrounded by lymph. The other portion of the intestines and the liver were healthy, except a softened patch on the superior surface of the right lobe. Gall-bladder, stomach, kidneys, and bladder were perfectly healthy.

LONDON HOSPITAL.

RUPTURE OF THE JEJUNUM FROM A KICK ON A HERNIAL SAC; DEATH FROM PERITONITIS IN THIRTY HOURS.

(Under the care of Mr. LUKE.)

THE injury in the present instance was more direct and violent than that in the preceding case, and the rupture of the jejunum at its junction with the ileum involved the whole of the gut, excepting about half an inch close to its mesenteric attachment. The hernial sac contained a large amount of adherent omentum. Death took place from peritonitis thirty hours after the injury, and at the autopsy the abdominal viscera were found glued together by lymph, which had already become organized, and contained an abundance of red vessels, carrying red blood. This circumstance has been before noticed in cases of recent peritonitis, and is well worthy of remembrance in a medico-legal point of view. It must be recollected, however, that in cases of advanced peritonitis the adhesions would be very much firmer and more resisting than they were in the present instance.

A stout, muscular man was brought to the hospital during the night of September 18th by the police, with the statement that he had been violently kicked in the groin. He was evidently very ill, and was writhing with intense pain. On examination, the left half of his scrotum was found to be distended by a hernial protrusion of about the size of a large fist, and which presented nothing peculiar in its general appearance. There was little evidence of bruising about the integuments. He stated that he had had a rupture on that side for some years, but had always been able to return it at night, and had never worn a truss. He had walked from Chatham to London the day previously, being then in perfect health. On reaching town about six o'clock in the evening, in the course of a public-house quarrel, he had been violently kicked in the groin. The kick, he said, "doubled him up," and gave him intense pain. From the time of its infliction until that of his admission into the hospital (nine hours), he had, according to the description of those who had remained with him, been in continuous and very severe suffering. The warm bath was used, and patient attempts with the taxis were made by Mr. Payne, the house-surgeon. It was found, however, impossible to return the bulk of the swelling, although it was considerably diminished in size, probably from the pressure of fluid out of the sac. No gurgling whatever was felt.

At ten o'clock the next morning, sixteen hours after the injury, Mr. Luke saw the patient, and, having learned the history of the case, advised an immediate exploratory operation. The man's condition was now urgent. He had frequent vomiting, great thirst, and an aspect expressive of severe suffering. His respiration was wholly thoracic and rapid. He had extreme tenderness over the whole abdomen, and could not bear the slightest pressure. Having laid open the hernial sac, Mr. Luke found that it contained a large mass of omentum, which was firmly fixed by old adhesions to the lower part of the sac. There was no stricture in the inguinal canal, and the finger passed up it with the greatest ease. A careful search was made amongst the folds of omentum to ascertain if any gut were present, and in doing this, two portions of ingesta—one resembling a piece of chestnut, and the other the husk of a bean—were found. No feculent odour was detected, nor was any fluid in the least resembling fæces seen. A moderate quantity of nearly limpid serum escaped from the sac. Mr. Luke, and also one of his assistants, passed their fingers up the whole length of the inguinal canal, but in neither instance was the finger observed to be stained by intestinal contents. The omentum, being too firmly fixed to admit of reduction, was left in the sac. The wound was closed, and the patient returned to his bed.

The man lived about fourteen hours after the operation, his symptoms continuing just as they had been previously. The rapid and exclusively thoracic character of his respiration was throughout very marked. His abdomen, although exceedingly tender, did not become distended. It was clear, from the presence of the foreign bodies in the hernial sac, that a rupture of the intestine must have occurred; while the absence of fluid fæcal extravasation made it seem probable that the ruptured gut must have slipped back almost immediately after the accident. The symptoms had been precisely those of intense peritonitis from internal extravasation.

The autopsy was carefully performed by Mr. Payne about

twelve hours after the man's death. On laying open the abdomen, the intestines, omentum, liver, &c., were found universally matted together by a thick layer of recent lymph. This lymph, however, had acquired in many places such strength, that a certain degree of force was required to separate the parts, and here and there it was seen to be abundantly supplied with vessels. Small portions of what looked like fluid fæces, but almost without odour, were observed upon the surface of the intestines; and the peritoneal serum, of which there was a large quantity, was turbid, and mixed with fæces. Close above the opening of the left inguinal canal, a coil of intestine was found matted into a sort of loop by adhesions, and was torn almost through its whole circumference. The laceration involved the whole of the gut, excepting about half an inch close to its mesenteric attachment. The injured portion was at or near the junction of the jejunum and ileum. The large mass of omentum which occupied the hernial sac was in almost the same state as at the time of the operation, and showed no sign of inflammation. It may be noted, in respect to the diffusion of the intestinal contents amongst the abdominal viscera, that a seed resembling an orange-pip, and also a portion of a bean-husk, were found between the coils of intestine, just below the free edge of the liver.

MIDDLESEX HOSPITAL.

PERFORATION OF THE ILEUM BY A PIECE OF BONE; ACUTE PERITONITIS WITH SYMPTOMS SIMULATING STRANGULATED FEMORAL HERNIA.

(Under the care of Mr. FLOWER.)

THE chief feature of interest in this case is the perforation of the ileum, some eight inches above the ileo-cæcal valve, by a fragment of beef-bone, an inch and a quarter long, which had become impacted crosswise near the constricted part of the bowel. The rarity of this circumstance is remarkable, if we reflect upon the fact of dogs (and even human beings) frequently swallowing fragments of bone of various dimensions, without any inconvenience, the osseous material becoming dissolved or disintegrated by the gastric juice. Why that did not take place here, is a question of physiological interest. In the human subject, what is feared in the swallowing of elongated bodies is lodgment in the œsophagus; but when they pass into the stomach, and thence into the intestine, the danger of impaction is very much lessened. The general symptoms most strongly simulated a strangulated femoral hernia, and it is pretty evident that there had been no portion of the intestine in the hernial sac lately; but it had become distended with fluid, which, being pressed back into the abdomen, gave rise to the sensation of reducing a rupture.

A. A——, a female, aged fifty-eight, laundress, unmarried; health usually not good; admitted into Bird ward Sept. 23rd, 1860. Four days before admission, she was seized with troublesome vomiting, which has continued to the present time; the bowels were last open on the same day. Yesterday morning, she was seen by Mr. Ayling, of Great Portland-street, who found her with an extremely anxious countenance, much pain and tenderness in the abdomen, and constant vomiting, of a decidedly stercoraceous character. On examining the groin, he found a small tumour (apparently a femoral hernia) in the right side. After application of the taxis, this was reduced. This morning, he found that the tumour had returned to the same size as before, and the symptoms had not in the least abated. She was then sent to the hospital. It should be mentioned that she stated she was not aware of ever having had a rupture previously, and had consequently never worn a truss.

On admission, at one P.M., her countenance was pale and pinched, exhibiting great distress; tongue furred and moist; pulse 98, small and weak; abdomen full and tympanitic; complains of great pain in the abdomen and right inguinal region, which is extremely tender. There is a small, hard tumour immediately below Poupart's ligament, not larger than half a walnut, and, as the patient is stout, not very distinctly felt. Coughing appears to give no impulse to it, but she has scarcely power enough to make the effort. After pressing with the fingers upon this for a few minutes, it disappeared, with an obscure, gurgling feel, giving the impression of reducing a small piece of intestine; a slight fulness, however, remained in the part. As she had not passed urine for two days, a catheter was introduced into the bladder, but not more than an ounce was drawn off. She was ordered to be kept quiet, to have a fomentation upon the abdomen, and to take some strong beef-tea, in small quantities.

On seeing her again in the evening, Mr. Flower found the abdominal pain as severe as ever; the stercoraceous vomiting had continued, and fulness in the groin increased, though not quite to the size that it was upon her admission; it was accordingly, after a consultation, determined to operate.

She was placed under chloroform, and a vertical incision, two inches long, made over the situation of the femoral ring. After dissecting through a considerable layer of fat, a small pouch of sac was found projecting under Poupart's ligament. It was very vascular, of a dark colour, much thickened, and adherent to the surrounding tissues. On carefully laying it open, a small quantity of dark serous fluid escaped; it contained nothing else. Its neck was so constricted that it would not admit the tip of the finger; a large director, however, passed up readily, and upon this it was divided in an upward and inward direction. The finger could now be passed into the abdominal cavity, and the intestines be felt; but nothing could be discovered which appeared to cause any obstruction. A small hard body was felt lying apparently on the surface of the peritoneum in the iliac fossa; its elongated shape could be readily defined, and it grated upon the end of the forceps introduced with a view to remove it, but it appeared attached. While exploring with the finger the interior of the cavity, a gush of fluid took place, of a pale yellowish-brown colour, like very thin pus, with only a faint odour; it was not in the least stercoraceous, but when examined microscopically it presented traces of fæcal matters, and crystals of triple phosphate.

The operation threw no light upon the nature of the case; but as nothing further could be done, the wound was partially closed, and she was returned to bed, and had a full dose of morphia administered endermically. The vomiting ceased, but she gradually sank, and died twelve hours afterwards.

Autopsy twenty-three hours after death.—About a pint or more of thick dirty-yellow fluid was found in the peritoneal cavity. On microscopic examination this was found to contain fragments of vegetable tissue, starch globules, triple phosphates, oil, pus, &c. The whole of the intestines were covered with flakes of recent lymph, and glued together; this condition of the peritoneum extended up to the liver and under surface of diaphragm, and to the abdominal parietes. The whole of the peritoneum covering the intestines and the abdominal parietes was intensely injected, this injection being of a punctiform character, and most marked towards the right inguinal region. Here the lower portion of the ileum was very intensely red, and glued by lymph to the abdominal parietes and adjoining coils of bowel. In the ileum, eight inches and a half above the valve, was a small perforation, but which at the time of examination was closed up by lymph. The intestine below this was much contracted as far down as the valve, its walls when slit open not measuring more than an inch and a quarter; whereas above the perforation the bowel appeared dilated, its circumference being two inches and three-quarters. The injection was much more intense above the perforation than below it. Outside the bowel, very near the perforated part, lying loose in the peritoneal cavity, was a splinter of bone (beef?) an inch and a quarter long and one-fifth of an inch broad. The hernial pouch was more fully examined, and found to be not larger than a pigeon's egg, empty, and firmly adherent by its outer side to the surrounding tissues. There was nothing worthy of observation in the other viscera, except that the kidneys were somewhat granular, the cortical substance atrophied, and the capsules adherent.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

TUESDAY, DEC. 11TH, 1860.

MR. SKEY, F.R.S., PRESIDENT, IN THE CHAIR.

ON A CASE OF ELEPHANTIASIS OF THE LEG AND FOOT.

BY C. T. RICHARDSON, M.R. CANTAB.,
SENIOR PHYSICIAN TO THE METROPOLITAN FREE HOSPITAL.

THE subject of the above affection, born in the county of Tipperary, and the eldest of five living children, came under my observation, in October last, as an out-patient at the hospital, suffering from acute bronchitis, cough, and palpitation of the

heart, accompanied with symptoms of general debility and cachexia. Upon questioning her more fully as to the nature and duration of her ailments, she made known to me the existence of the diseased condition now presented by her leg and foot, and she was admitted into the hospital, when subsequent opportunities enabled me to obtain the following general history, not only of her case, but also of the antecedents of her parentage and the present condition of other members of the family. Her parents are Irish. The father, as a youth of fourteen years of age, enlisted into an infantry regiment, and after being kept upon home stations for four or five years, was ultimately sent to the West Indies, and passed the last seven years of his sojourn there in the island of Jamaica continuously, enjoying very good health and indulging in only occasional irregularities. Upon his return home he very soon married (at the age of twenty-eight), and my patient, the subject of this disease, was the first issue thereof, being born a healthy child at the full period, without spot or blemish, and so continued to be until she attained the age of fourteen years, at which time she came from Cork to London by sea to live with her parents, who had then located here. A second child (a son) was born in due time after the first; and the father, having then entered into the service of the Queen of Spain, left for that country, accompanied by his wife, who during her residence of two or three years there gave birth to a third child (a girl). The first notable interruption to the patient's health was the manifestation of an abscess upon her right arm shortly after she came to London, quickly followed by several others in various parts of the neck, trunk, and arms, for which she was under treatment at the Ailie-street Dispensary. She was then one day suddenly seized with severely acute pain in the great toe of the left foot, followed quickly by heat and redness and considerable swelling, so much so as to induce the father to think it was a severe attack of acute gout. This condition continuing to increase, admission was obtained for her into St. Thomas's Hospital, where she remained under treatment five months, ultimately leaving the institution greatly improved in the general conditions of health, with the exception of the foot. During her residence therein, suppuration to a considerable extent had taken place in the toe; the pain had ceased, but the swelling had extended over nearly the whole upper surface of the foot, and the integuments had become considerably thickened and indurated. In this state she left; from which time to the present the foot and leg have been wholly without treatment; the disease has been entirely neglected, and suffered to increase gradually during a period of fourteen years, and to develop itself into the condition it now presents, involving not only the foot but the leg also. When first presented to me, the foot was a mass of filth and dirt, the result of neglect and the accumulation of a thick, tenacious, yellow discharge, issuing and oozing from almost all parts of it, and emitting an intensely disagreeable odour. Upon the removal of most of this, the foot was found considerably enlarged, although symmetrically so. The plantar surface was smooth and natural, sensitive to all external impressions, and of natural temperature, being free from the condition of the dorsum. This latter consisted of a state of considerable thickening and induration of the integuments, commencing from the very margin of the plantar surface on both sides of the foot and round the heel, extending over the entire upper surface of the foot to about three or four inches above the instep upwards, and involving the whole of the toes with the exception of their nails. The toes are all considerably enlarged, and, like the foot, symmetrically so; and each is separate and free. This thickened integument is then covered generally with a mass of hard, semi-horny nodular masses, more or less covered and interspersed with wart-like papillæ and plates. There are two fissures interrupting it, one corresponding to the flexure of the instep, bounded above by a fold of thick indurated integument, the margin of which is similarly horny, and separates it from a deeper and broader fissure above. This latter is capable of admitting three fingers within it, having also a fold of thickened, indurated integument at its upper boundary; whilst the floor and sides of both these are smooth, and more natural in appearance. The scaly or warty condition extends only about two inches above this upper fold, when the leg assumes, from the heel upwards, a condition of uniform and symmetrical enlargement, extending to the knee. To the eye, the integument is of a pearly white colour, glistening and tense; and, to the touch, conveys an idea of hardness and solidity, unlike the doughy and resilient condition of anasarcous œdema. The girth around the calf is now 18 in., and 14 in. at the ankle; the healthy leg being, in corresponding situations, 11 in. and 9 in. respectively: the above being an increase of one inch and more since her abode in the hospital. The disease is perceptibly advancing, as thickening and induration are commencing above the knee; but there is no enlargement of inguinal glands. She does not complain of pain or inconvenience from it, beyond that which arises from its bulk interfering with rapid progression, and the results of over-fatigue or long-standing. She is now twenty-eight years of age, and has never had any indication of the approach of the function of menstruation; nor has she the slightest development of mammæ, there existing only two very small integumentary representatives of nipples, without areolæ, to mark their usual site. She is of tolerable intelligence; dull, apathetic, and inactive in general character; and possesses a hoarse, harsh-toned, nasal voice. The tonic treatment by steel, and the adjuncta thereto of nutritive diet and domestic comforts, have materially improved her general constitutional health and appearance. The general strumous condition and diathesis is peculiarly manifest in her, and also in the two children born in immediate succession to her, both the boy and girl already referred to having been the subjects of very extensive and continuous manifestations of it ever since the period of their puberty. The girl has been under long-continued treatment, and is at the present time, for repeated chronic and diffuse abscesses in various parts of the body; but, unlike her sister, has regularly menstruated, possesses large and natural development of mammæ, and is of remarkably fair complexion, with light hair. The parents, aged fifty-eight and fifty-one, are still living, and apparently healthy people, as also are their two youngest children.

The question I would wish to raise is, as to how far this disease may be referred to some special taint or power acquired by the system of the father during his long residence in the poisonous region of the tropics, then imparted to this girl, his earliest offspring, after his return, and that remaining dormant and undeveloped in her until conditions suitable for it arose, in her being transferred from her former home of pure air to the densely crowded neighbourhood of eastern London.

Measurement of leg on Dec. 11th.—Round the leg just above the ankle-joint, 14½ in.; at the calf, 20 in.; below the knee, 19 in.; above the knee, 18 in.

Dr. WEBB (of the Indian service) said that the disease was very common in Bengal. There were two varieties of it: one arose from syphilis, which might be hereditary or otherwise; the second had its origin in malaria. A disease known by the name of the "moon fever," and influenced by the changes in that planet, first attacked the patient; this was followed by pain in the groin and swelling in the leg or scrotum. After a few years, the patient ceased to notice the fever as influenced by the moon, but the tissues in the affected parts continued to grow. If the patient was now removed from the malarious district to the upper parts of the country relief followed, but the symptoms returned as soon as he came back to the unhealthy locality. The identity of elephantiasis as affecting the leg and scrotum was proved by the occasional metastasis of the disease from one part to the other. The majority of the cases which occurred in women were of a syphilitic origin. In both sexes, the genital organs often attained an immense size. In the endemic cases the skin was smooth; in the syphilitic ones tuberculated. Dissection showed that though the nerves became much enlarged, there was no increase in size of the vessels or muscles. He thought that Dr. Richardson had correctly explained the cause of the disease in the case before them, which he (Dr. Webb) regarded as syphilitic, influenced by malaria. That the disease was constitutional was proved by the fact, that in persons affected by it all the organs of the body were occasionally found in a state of advanced fatty degeneration. When a person had been affected with this disease for ten or twelve years he became dull and stupid, the brain having undergone some change, such as hardening of its structure.

Mr. HUTCHINSON exhibited a photograph of a case of elephantiasis of the scrotum. The patient was a young Irishman, of Belfast, twenty-five years of age, and had been affected with the disease for the last five years, during which time it had been gradually increasing. He knew nothing further of the history of the case, except that the man had never left his native country. He (Mr. Hutchinson) inquired of Dr. Webb whether, when the case was of a syphilitic origin, it usually affected the child first born? and whether it was most common in the male or female? He had found it most common in the female sex.

Dr. WEBB could not answer the first question, but certainly in the majority of cases that had come under his care the patients were women. It must be recollected, however, that in the Indian hospitals these women were usually prostitutes. In the

endemic instances the beneficial influence of quinine was remarkable, the mass often entirely disappearing. Pressure, steadily applied to the parts affected, was also of great benefit. Compression, with an application of iodine, exerted a useful influence when the penis was affected. In cases in which the entire diseased mass in connexion with the genital organs was removed by operation, the disease never returned; but this was not the case when any portion of the diseased structure was left.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, DEC. 5TH, 1860.

DR. TYLER SMITH, V.P., IN THE CHAIR.

ON THE VALUE OF ANÆSTHETIC AID IN MIDWIFERY.

BY CHARLES KIDD, M.D., M.R.C.S.

IN obstetric practice, the instances where the author has found the inhalation of ether or chloroform to be called for in an especial degree, and where anæsthetic aid has proved decidedly useful, have been cases of version, forceps, twins, convulsions, and crotchet operations. He has known chloroform used in puerperal mania, but its apparent effect is perhaps a coincidence, and not of a curative nature. The author referred the Society to his previous work on "Anæsthetics," where the result of 360 cases of midwifery treated under ether, and 1700 under chloroform, without accident from fatty heart, are described. Of these two agents (though there have been twenty-five deaths from ether in general surgery), he believes ether is superior to chloroform in relaxing rigid perinæum in labour, and otherwise acting on the muscle of the uterus, in version cases particularly. There have been no accidents from chloroform in about 30,000 cases of midwifery conducted with the aid of these agents. The mode of applying chloroform in the lying-in chamber recommended was that which is adopted now by all the chief obstetric practitioners in Europe and America with whom the author has personally communicated on the subject. In midwifery practice, the error of using "mixtures" of ether and chloroform was explained, as a patient supposed to be inhaling a mixture is in reality inhaling pure ether, and there is a danger of confusion arising in mistaking one anæsthetic for the other. A new anæsthetic of chloroform and ergot mixed was also mentioned.

Cases of twins, where the second child presents with an upper extremity, "the pains severe and continuous, so that it is next to impossible for the accoucheur to introduce his hand to turn the child," were first described, where chloroform is invaluable, if there be no contra-indication of diseased heart, &c. The several indications in undilated os uteri for tartar emetic, liquor opii, or chloroform, from the result in actual practice, were explained. Next, those cases of twins were pointed out where at one particular stage it is judicious to allow an interval of rest to the uterus; here ammonia and ergot act like a charm; not that chloroform is injurious, but it requires to be given before or after ergot, and not at the same time. The author said that if, in journals, half the attention were given in fact to these points that is given to quack compounds of chloroform, all would be right.

As in some cases of twins, so is it in some cases of "tedious labour;" the patient requires an interval of rest to renew reflex action and remove the effect of exhaustion, "false pains," emotion of a depressing kind, sleeplessness, &c. Thus, an inexperienced or constitutionally delicate young woman, with her first or second child, becomes alarmed, sleepless, &c., during her labour. Some indigestion, diarrhœa, or fright, has hastened her labour before its time. The first stage of labour has been attended with suffering, followed by fatigue. Here the pains are ineffectual in advancing the labour; but if there be no diseased heart or other contra indication to anæsthetics, the author strongly advocates their administration in the manner pointed out in the memoir.

How does sleep during labour differ from anæsthesia? Sleep, according to the author, occurs only where there is exhaustion of sensorial or muscular power; anæsthesia is best where there is no exhaustion; it is independent of sleep. The reflex power of Marshall Hall is the frontier or limiting line between sleep and anæsthesia; in sleep it is active, in anæsthesia absent. In tedious labour, the agony and pain will not permit the poor woman to sleep. Even opium is followed but by a tedious intoxication, without sleep, for hours; but chloroform is not an intoxicant, and acts at once and quite as safely. A patient in ordinary anæsthesia may be said to be doubly asleep. This is what is wanted for a short time in this class of labours, as thus reflex, sensorial, and muscular power are renewed. Emotion, also, is removed out of the way by chloroform sleep; and by a confident, cheerful demeanour on the part of the accoucheur, he may effect as much in two or three hours by chloroform as he might in almost as many days by delay, and opium, and waiting for nature.

Cases of versional delivery, with and without chloroform, were next minutely described and compared; cases especially of excessive sensibility of the os uteri and vagina, where the waters have long come away, and the uterus has closed with spasmodic force over the fœtal hand and arm. One well-known obstetrician has had 300 such cases; and he is every year more and more satisfied with the aid afforded by chloroform. The value of versional delivery and its *rationale* were also enlarged upon, as well as the much-to-be-desiderated probability of the abolishing of craniotomy, and of many cases where the forceps is unnecessarily and cruelly resorted to at present.

Next to version cases, the usefulness of chloroform in forceps patients was explained, and directions given as to the mode of administration. Chloroform in abortion cases at the fifth or sixth month, as advocated by Dr. Tyler Smith, was also dwelt on; and even in cases of placenta prævia, as administered by Professor Simpson, Denham, and others. Chloroform, as facilitating delivery by means of version, has been tried with advantage to anticipate hæmorrhage. Ammonia or brandy is first given, chloroform then administered, the feet brought down, and the remainder left to nature as the chloroform wears off.

The treatment of particular forms of puerperal convulsions by chloroform was entered into and explained, especially its usefulness in that form common in poor unmarried women—convulsions the consequence of mental emotion, or epileptic excitement; but in the class of cases tending towards, or the result of, apoplexy, and those with albuminuria, the use of chloroform or opium must be somewhat secondary, Dr. Kidd thinks, to the general treatment and general relief of the congested cerebral or spinal membranes. The author is not favourable to the use of anæsthetics in the simple hysteric varieties of the disease, hysteria generally being one of the contra-indications to the administration of chloroform.

The law of tolerance of chloroform in midwifery is not unlike that of the tolerance of ammonia, steel, bark, wine, opium, &c. All these medicines are of exceeding value where there is present shock to the nervous rather than to the vascular system. Chloroform is invaluable where there is exhaustion, debility, or shock, the result of great or long-continued pain; where there is loss of nerve force, or convulsions from excess of reflex irritability or pain, or mental emotion or excitement, &c. But chloroform is of less importance, as even wine, bark, iron, ammonia, &c., are of less use, where there is exhaustion the result of hæmorrhage, hectic, diarrhœa, exhausting suppuration, &c. Such diseases as chorea, asthma, whooping-cough, tetanus (not unlike puerperal convulsions), are blotted out by chloroform, no matter how apparently weak the patient may seem; but it is different with debility from hæmorrhage or diarrhœa.

The author's further experience of chloroform, in operation cases of craniotomy, vesico-vaginal fistula, ovariotomy, enucleation of uterine tumours, &c., in which he has administered it largely, was, in conclusion, recited.

DR. TANNER stated that he made it a rule always to take chloroform with him to every case of labour. When the pains become bad, he explains to the patient—provided he finds no objection to the employment of an anæsthetic—that he can relieve her of all suffering, if she wishes it, by means of chloroform. Many patients are anxious to inhale; a few decline. During the present year, Dr. Tanner had only had one case in his private practice which had caused him much anxiety; and in this the dangerous symptoms arose, as he believed, from the formation of a clot in the right side of the heart. This lady did not take chloroform. Dr. Tanner observed that he was careful only to give this anæsthetic during each labour pain, taking away the handkerchief or inhaler directly the pain went off. Stating the results of his experience briefly, he might say that he had never found chloroform do harm, but, on the contrary, much good; while it shortened the after-period of convalescence. He was careful, in cases where he feared hæmorrhage, to give a large dose of ergot towards the close of the labour; but he did not object to the use of chloroform as well. In operative midwifery anæsthetics were invaluable.

Mr. GERVIS referred to two cases of death from chloroform which had come under his notice in hospital surgical practice[1]

in both of which the patients had previously been the subjects of delirium tremens; and in both the muscular tissue of the heart was found, after death, to be soft and greasy—a condition, indeed, which the result of many examinations showed to be tolerably uniform in most cases of death from delirium tremens. Mr. Gervis considered that these cases, though not obstetric, would tend to corroborate the view of the unadvisability of administering chloroform in labour where the patients had been the subjects of alcoholism.

Dr. BARNES rose to disclaim all responsibility in the case of death after chloroform which Dr. Kidd had cited in connexion with his name. The case had been related by Professor Faye, of Christiania. He (Dr. Barnes) had simply recorded it in an English journal. With respect to the uses of chloroform in obstetrics, Dr. Barnes had found, in large experience of turning, that in many cases chloroform did not facilitate the operation. The influence of the brain removed, the excito-motory system seemed to act more violently, and sometimes spasmodically, the uterus resenting the introduction of the hand. Under ordinary circumstances, turning could not be regarded as a severe or painful operation. Delivery by turning was sometimes less painful than by the head. Again, in ordinary forceps cases, chloroform was certainly not required either to facilitate the operation or to allay pain. In operative midwifery, chloroform was most useful in turning where there was unusual difficulty, and in difficult delivery after craniotomy. It appeared to him incomprehensible how a special immunity from the perils of chloroform should pertain to puerperal women. To say that 40,000 women had taken chloroform in labour, without any mishap, was one of those vague statements which were entitled to little weight. He had himself given chloroform to facilitate the extraction of an adherent placenta, and had witnessed such exceeding prostration for three hours afterwards as to make him and another practitioner, who assisted, apprehensive of the instant death of the patient. He should be sorry to have it supposed that he entertained any prejudice against chloroform. He knew its value in certain cases, and gave it with care, and yet without timidity, and should not be deterred either by the bad effects he had witnessed or by those he had heard of from giving it on proper occasions. He had been especially gratified with the beneficial effects of chloroform in cases of great nervous excitement, where the patients laboured under a sense of dread of impending danger, and where even convulsions seemed to impend. He believed he had thus averted convulsions, and had certainly accelerated labour. He thought it worthy of inquiry why anæsthesia had made so little progress in Germany, where interference in labour was so much more general. It was also worthy of remark that English midwifery maintained its greatly superior success, notwithstanding the introduction of chloroform.

Dr. GREAM said that, from some observations which had been made, it might be inferred that chloroform was but little used in midwifery in London; but he was sure that in no place was it more extensively employed, and he could positively state that amongst the upper classes it was almost universally employed, but with a general feeling of abhorrence of anything like intense insensibility. Surprise had been expressed by Dr. Barnes at the statement that so large a number of cases had occurred in which chloroform had been used in midwifery without accident; but there appeared to be no difficulty in understanding this, for it should be remembered that it was never right, nor was it required, to carry insensibility so far as in surgery; and he (Dr. Gream) was sure that all the fatality which had attended the exhibition of chloroform in midwifery had arisen from some little want of care, or from a want of appreciation of its power. When anæsthesia was first introduced he had opposed, with others, the indiscriminate use of it, for he thought that at that time it was recklessly employed; and he believed that the present safe and efficient manner in which it was exhibited in London was the result, in a great measure, of the opposition offered to its former indiscreet and dangerous employment. It was a fact, that no death from chloroform in midwifery had occurred in London; but allusion having been made to two authorities "beyond the Tweed," it was right to state that *there* the same immunity from calamity had not been enjoyed; yet he felt sure that no agent could be more safe, and none more beneficial, than chloroform in midwifery when properly administered. He thought the author of the paper had unintentionally exaggerated the ill effects (if there were any), and also the good effects, of chloroform. For three reasons he (Dr. Gream) thought chloroform most beneficial in labour: it removed pain, it rendered turning more easy, and it facilitated recovery; while the only detrimental effect was in protracted labour with pelvic contraction, where, by lengthening the intervals between the uterine pains and slightly diminishing uterine power, it might cause delay; but its advantages in all other respects made full recompense for this one drawback. In instrumental delivery of every kind it was most advantageous, and he had seen fewer cases of hæmorrhage since he employed chloroform; indeed he had exhibited it to patients who had habitually been subject to this occurrence without hæmorrhage supervening—a fact worthy the attention of theorists, but nevertheless a fact. Each person had his own way of administering chloroform. He had tried several plans, but of late years he had employed a common tumbler, into which he placed the chloroform, together with a clean pocket-handkerchief moistened with about two drachms of the fluid. This quantity ought to last two hours or more. The patient's face projected over the side of the pillow, and the nurse or the husband (strictly under his direction) placed the tumbler under her nose and mouth at a distance of about an inch and a half or two inches, and thus the vapour rose perpendicularly towards her. She soon expressed a sense of giddiness; but the tumbler was still retained, until there was nearly an inability to answer any simple question put to her, and that should be the point beyond which no advance should be made. The chloroform should be now removed, and be replaced in a few minutes; and by thus being replaced and removed from time to time, while the pulse is felt and the respiration watched, a labour might be conducted through its stages without danger and without pain. He had never, during the number of years he had used chloroform, had one moment's anxiety as to its effect upon any patient to whom he had administered it. The object of the handkerchief in the tumbler was to prevent any chloroform from running out or escaping on the bed if the tumbler fell over. He had found that any handkerchief or machine with which it was necessary to touch the face had the effect of rousing the patient, and thus did harm.

Dr. DRUITT said that he believed there were very few labours in which chloroform might not be used with benefit at some stage or other; and that even when all the earlier stages go on easily and well, it is the greatest comfort at the final moment when the head emerges from the outlet. He did not believe that chloroform predisposed to hæmorrhage; on the contrary, he knew women who had flooded severely in earlier labours, when they had no chloroform, and who had been confined under chloroform subsequently without hæmorrhage. Neither does it seem to retard uterine action after the first inhalation or two, provided that it be used in the small doses which reason dictates; nay, it removes that obstacle to uterine action which is created by excessive sensitiveness of the orifice and passages, and which causes uterine action to be abortive. He knew a case in which, after a very slight inhalation, enough to tranquilize, but not stupefy, the head was driven through, with rupture of the perinæum,—that external sensitiveness having been allayed which is a bar to uterine action. In cases of protracted labour from rigidity, such as happen to robust women who marry rather late in life, the blessing of chloroform was incalculable. These were the cases formerly treated by bleeding, tartar emetic, and opium; and in opposition to the author, both opium and emetic-tartar, in minute doses, were admirable adjuvants in the proper cases. No amount of torture equalled that which many women endured from excessive uterine action and quasi-inflammatory rigidity of the os, and chloroform agreed well with any other proper remedy that might be devised. The only reservation he would make was, that chloroform should be used in the minutest quantity, and the minutest quantity sufficed. Two drachms was enough in most labours, a few drops at a time, to imitate the normal condition of labour; that is, a short snatch of refreshing sleep at the end of every contraction, and a little drowsiness beyond. He had met with two cases in which a very small quantity of chloroform produced symptoms of angina pectoris, in women whose hearts were weak, and in such cases he thought that the risk ought not to be run.

Mr. BROWNING's experience was in favour of the use of chloroform, especially in complicated and difficult cases of midwifery.

Dr. ROGERS was glad to hear Dr. Gream so candidly avow the alteration of his opinions on the subject of chloroform in midwifery. Dr. Rogers knew of one case, which occurred at Camden-town, in which death took place apparently in consequence of the employment of chloroform in midwifery. In his own practice he had never met with the slightest accident from its use.

Dr. GRAILY HEWITT stated that the fatal case alluded to by Dr. Rogers, and which occurred some three years ago, was, as

he had been informed, one in which the patient was labouring under alcoholism when the chloroform was administered; the gin-bottle was, in fact, found under the pillow after the patient's death. This case was therefore confirmatory of the opinion advanced by Dr. Kidd as to the danger of chloroform in such cases—an opinion also supported by Mr. Gervis's experience. With reference to the general question of the dangers of chloroform in midwifery practice, he considered that there could be no reasonable doubt that chloroform was neither more nor less safe in cases of midwifery than in other cases. It was well known that in operations generally chloroform had not proved always safe; and it was as reasonable to suppose that death might occur after the use of chloroform in midwifery as after the use of chloroform under other conditions, the result not being connected in any way with the special circumstance that the patient was in labour at the time of its administration. One question—a very important one, as he considered—had not been touched upon by the various speakers, excepting in a very incidental manner—namely, the effect of the employment of chloroform in cases of puerperal convulsions. On the data furnished by various recorded cases, he had failed to arrive at any sufficiently general conclusions in answer to this question. The difficulty of establishing the relation of cause and effect as regards the action of medicines was universally admitted; and in reference to the supposed beneficial or other effects of chloroform in puerperal convulsions, the tendency of the evidence as yet adduced was not always uniform. In a case recently published in one of the American journals, the patient being affected with uræmic symptoms, the occurrence of puerperal convulsions was anticipated, and chloroform was given to ward them off. The chloroform did not, however, prevent the access of the convulsions, although it is stated that they were modified and lessened under its influence.

Dr. TYLER SMITH agreed with nearly all that had fallen from the previous speakers in favour of chloroform in obstetric practice. He thought it might be laid down as a principle in regard to its employment, that besides its value in allaying pain, it was useful in all cases, especially in operative midwifery, where it was desirable to moderate excessive action of the uterus, and to promote dilatation and relaxation. He held, on the other hand, that it was contra-indicated in cases where there was deficient action of the uterus, as in feeble and tardy labour from inertia, and in cases where hæmorrhage was expected. He had seen it stop the course of labour midway, and he believed that post-partum hæmorrhage and retention of the placenta occurred more frequently after its use than without it. One good effect of the discussion on the present paper lay in the differences of opinion which had been elicited. The causes of these differences would be studied, and the truth brought out. It could not possibly be correct that chloroform relaxed the uterus so as to facilitate turning, and made it contract so as to increase the difficulties of this operation; or that it could both cause and prevent hæmorrhage. He had himself no doubt of its usefulness in difficult cases of turning. He had met with cases in which version had been accomplished by its aid, where without it the operation would have been utterly impossible. He had seen mania follow its employment, and he thought that in some cases the relation was that of cause and effect. He had also met with bad cases of rupture of the perinæum under its use. The patients were relieved from pain, but volition was not suspended, and under these circumstances, the violent and fearless straining efforts ploughed up the perinæum by the fœtal head during the expulsive pains. It was of very great consequence to lessen, as far as possible, the dangers attending this great and beneficent agent. The influence of fatty heart, alcoholism, and other conditions, in fatal cases, had been much debated; but there was another source of danger which, so far as he was aware, had not been dwelt upon. He referred to idiosyncrasy. He had known patients affected to a poisonous extent by ordinary doses of ether or chloroform. He knew two ladies, in apparently good health, in whom a few drops of chloroform would at any time produce repeated faintings. He suspected, therefore, that some of the inexplicable cases of death from chloroform depended on idiosyncrasy, and before its administration it would be useful if patients were tested as to their tolerance of its effects.

Dr. KIDD, in reply, thanked the Society for their very flattering and kind estimate of the paper. One or two points had dropped out in the reading which perhaps might be supplied. He did not himself think in forceps cases chloroform is indispensable; but he furnished the usual directions for chloroform, whether before or after the blades were applied, &c. Chloroform, by facilitating versional delivery, will lessen the present number of forceps cases. The President, in his able summary, mentioned "idiosyncrasy" as a probable cause of death. This can scarcely be, as, in 100 deaths, about 40 of the patients had inhaled chloroform (two or three, or even in some cases ten times) previously without suffering from it. The word idiosyncrasy is vague, and would cause unnecessary alarm, which always does evil. Delirium tremens, "alcoholism," hysteria, might be substituted for idiosyncrasy. As to hæmorrhage cases and the use of tartar emetic with chloroform in undilated os, he differed from Dr. Druitt. The men of practice differed from the men of the pen. The views expressed by Dr. Barnes were also such as were held by no other practical man in Europe: that version could be effected better without than with chloroform. Mania from chloroform is a similar error; and as to heart complications, diseased valves, &c., this is also probably a mistake of one book copied into others. The respiratory system is, in reality, the point where accidents originate; but there has not been a single death from chloroform in midwifery practice.

Reviews and Notices of Books.

Clinique Médicale sur les Maladies des Femmes. By G. BERNUTZ and E. GOUPIL, Physicians of La Pitié. Vol. I. Large 8vo. pp. 590. Paris: Chaumerot.

FRENCH medical authors often complain that English works are fragmentary, and that they give no comprehensive view of the subject in hand. They forget that very few minds are able to discuss, with equal depth of thought, any very extensive field of medical inquiry, and that the completeness of which they themselves boast is the mere result of scissors and paste. Drs. Bernutz and Goupil have adopted the English mode of writing, for they have only treated of such diseases of women as they have arduously studied for many years at the bedside. Their object has been to study effusions of blood in the peritoneal cavity in all their obscure relations, and pelvic peritonitis in its numerous bearings on diseases of women.

Their first volume elaborately exemplifies, by carefully-recorded cases, the varied mechanism by which this effusion of blood takes place, its numerous sources, and the processes by which death ensues, or health is restored.

The reader will be surprised to learn that 345 pages are allotted to the study of the retention of the menstrual fluid; but their perusal will show that the phenomena of *complete* menstrual retention throw new light on those cases of *partial* menstrual retention which we meet with in every-day practice as a consequence of inflammation, or of hypertrophy of the neck of the womb, of stricture of the os uteri, and mechanical dysmenorrhœa.

The volume also includes the last and most recent contributions to the study of hæmatocele that have hitherto appeared. Hæmatocele is a convenient name given by Professor Nélaton, in 1851, to that large collection of blood which sometimes takes place in the peritoneal cavity, which disease was elaborately described in 1848 by Dr. Bernutz, in the "Archives Générales de Médecine." M. Nélaton's attempt, therefore, to pass as a discoverer of a new disease is a most unfortunate failure, and a man of his standing could have well afforded to have fairly recognised Dr. Bernutz's prior claim to its elucidation. Our authors truly say, that hæmatocele is a symptom like hæmatemesis and hæmoptysis, and they argue that it is contrary to facts to explain this effusion of blood by one single theory. They find that the blood may come—

1st. From ruptured ovario-uterine veins when in a varicose condition.

2nd. From hæmorrhagic peritonitis.

3rd. From rupture of the ovarian tissue, or of the oviducts.

4th. From a catamenial impediment, which causes the menstrual blood to pass through the enormously-distended ostium uterinum of the oviducts, and through their largely-distended canals into the pelvic cavity, as in cases seen by Ruysch, Haller, Brodie, Munck, Tilt, and Bernutz.

5th. Hæmatocele may be metrorrhagic, or, in other words, blood may abundantly flow, at the same time, from both ends of the generative canal, the Fallopian, as well as the vaginal. This morbid *raptus* of blood towards the generative organs generally occurs at a menstrual period, but it seems to depend upon some diseased condition of the blood and vital powers, for it has been frequently observed in chlorotic and anæmic subjects, and also noticed in connexion with purpura, malignant jaundice, and malignant eruptive fevers.

It should have been stated that hæmatocele is the effusion of blood into the peritoneal cavity, totally independent of extra-uterine conception; as this is, perhaps, more frequent than hæmatocele, and is very likely to be mistaken for it, there was ground for reconsidering those pelvic blood effusions which depend on abnormal conceptions. This has been well done by Dr. Goupil, in the concluding part of the volume; but our space will not permit of our analyzing his work.

Some may object to the number and length of the cases recorded. It is true that our authors do not pander to the common taste for medical works made easy; they aim at being esteemed by the next, as well as by the present generation, and we can only say, that the perusal of their first volume makes us anxious for the second.

Chemistry in its relation to Physiology and Medicine. By GEORGE E. DAY, M.A. Cantab., M.D., F.R.S., Professor of Medicine in the University of St. Andrews. London: Baillière.

WITH great satisfaction we hail the publication of this work. Dr. Day has devoted himself for so many years to physiological investigations, and his knowledge of the foreign literature of the subject is so extensive, that any physiological work of his own could not be otherwise than meritorious, and, indeed, highly valuable.

It is true that Dr. Day's work on Physiological Chemistry is, to a great extent, a compilation; but the same may be said of nearly every similar work hitherto published. The subject is too comprehensive, consists of too many and various observations and details, to allow of any one person submitting the whole of them to his own independent and special investigation. The great merit of the author of this treatise is, that he has not merely gone to the best sources for his information,—and this, from his extensive acquaintance with physiological writings, whether English, French, or German, he was well able to do,—but he has availed himself judiciously of the materials thus acquired.

The subject matter of the work is divided into three heads, or books—

The first comprises the description of the organic substrata of the animal body, or of the proximate principles entering into the composition of the solids and fluids of the organism.

The second, that of the chemistry of the animal juices and tissues.

The third, that of the zoo-chemical processes, as the metamorphoses of the tissues, digestion, nutrition, respiration, &c.

The chapter on the urine is one of the best and most complete in the book.

The plates are the only part of the work with which we feel any disposition to find fault. We wish that the author, in place of reproducing those from Funke's Atlas, had given us a larger proportion of original illustrations. We do not regard Funke's figures as by any means so faultless or instructive, as to render their wholesale repetition desirable.

It is quite impossible, viewed medically and practically, to over-rate the importance of a knowledge of physiological chemistry. Every student and practitioner ought not only to possess, but to study some standard treatise on the subject, and we believe that he cannot do better than take the work of Dr. Day as his guide, it being the most recent, as well as one of the best treatises on physiological chemistry hitherto published.

The Medical Vocabulary: containing a Concise Explanation of the Terms used in Medicine and its Accessory Sciences. By ROBERT FOWLER, M.D., &c. Fcp. 8vo. pp. 366. London: Renshaw.

THE daily coinage of new scientific words is a source of considerable annoyance to many over-worked students, who do not at first see that a little present additional labour will ultimately prove a great saving of time. The practitioner also may occasionally complain, for with regard to Medicine alone, it is certain that its language is hardly the same that it was twenty years since. Who, for instance, can read some of the writings of the new chemico-physiological school unless he resorts to the aid of a dictionary? Without entering into any discussion as to the propriety of many of the novel terms which have been recently invented, we must yet allow that the employment of new names is unavoidable when actual additions are being made to our knowledge. This being the case, we feel that a debt of gratitude is due to any gentleman who goes through the weary labour of compiling a dictionary; more especially when we have, as the result of such work, an accurate, but concisely-written volume, published at a very moderate price.

Dr. Fowler has performed his task with considerable ability. He first gives the derivation of the word, and then explains its full meaning, together with the way in which it is employed; doing so in very pithy, but by no means inelegant language. His definitions take a wide range, for he deals with the nomenclature of Natural History and of Natural Philosophy, in addition to that of Medicine generally. Indeed, he might justly have styled his volume, "A Dictionary of Scientific Terms," for we have tested its pages rather freely, and have scarcely found missing any word, of which the reader of a modern scientific work can require an explanation. Looking to the months of hard work which Dr. Fowler must have gone through to produce this volume,—small though it may be,—we are tempted to ask what sin he can have committed, that he should have imposed upon himself such a heavy penalty; for have we not been told by Scaliger,—

> "Si quelqu'un a commis quelque crime odieux—
> S'il a tué son père, ou blasphémé les dieux,—
> Qu'il fasse un lexicon: s'il est supplice au monde
> Qui le punisse mieux, je veux que l'on me tonde."

RAPID LABOUR.

To the Editor of THE LANCET.

SIR,—Should you consider the following case sufficiently interesting in a medico-legal point of view, it will give me pleasure to have it recorded in the pages of THE LANCET.

Very lately, I was called to a woman who had given birth to a child. On arriving, I found her in bed, and a full-grown child (her second) beside her. Twenty minutes before, she was standing on the floor, aware that she was about her full time but having had no warnings of labour. Suddenly she felt "a cramp in the stomach," and the child dropped at her feet. She had no pain after the birth of the child, but I found the placenta close to the vulva, though so tightly grasped by the vagina that I had some difficulty in extracting it. There was no hæmorrhage from the ruptured funis, and little or no blood about the person of the mother. The woman was young and healthy, and made a rapid recovery.

I am, Sir, yours, &c.,

S. WORDSWORTH POOLE, M.D.

Birmingham Lying-in Hospital, Dec. 1860.

HEALTH OF LONDON DURING THE WEEK ENDING SATURDAY, DEC. 15TH.—The London returns of deaths for the two weeks of December exhibit a decrease on those for the last week of November. In three successive weeks the numbers were 1275, 1240, and (last week) 1208. The deaths from pulmonary disease, exclusive of phthisis, have declined to 261 last week, and bronchitis to 139. Pneumonia was fatal in 97 cases. Phthisis decreased to 119 deaths, about half of which occurred in the period of life, twenty to forty years. There were 3 deaths from small-pox in the week, 55 from measles, 52 from scarlatina, 14 from diphtheria, 43 from whooping-cough, and 31 from typhus.

THE LANCET.

LONDON: SATURDAY, DECEMBER 22, 1860.

THE Smithfield Club are closely associated in their labours with the medical profession. They are great experimental physiologists. In the Cattle-show they annually exhibit the result of their scientific investigations; and a very substantial result it is—one calculated to interest not alone the agriculturist, the butcher, and the consumer, but the physician also, and even the statesman. The spectacle, no doubt, suggested many and various reflections in the minds of the many thousands who, last week, paid a visit to Baker-street. As in a theatre it is not possible for any two spectators to view the performance on the stage in exactly the same aspect, so a Cattle-show, especially if held in London, will necessarily be regarded from many different stand-points. The breeder takes up one special position; the landlord another; the artist a third; the butcher has his position; and no doubt HENRI and THORLEY, of cattle-food notoriety, have theirs. We have ours; indeed, by slightly shifting our ground, we have the advantage of studying the scene from two points of view: first, as physiologists; secondly, as physicians. In our first character, we find much to admire; in our second, something to deplore. When we behold those magnificent Devon and Hereford steers, whose classical heads and admirable proportions might rival the ideal creations of the sculptors of the Parthenon, or those beautiful varieties of the Southdown and Leicester sheep, our first thought is of the science, the practical skill, the enterprise, and the perseverance which must needs have been expended in the production of animals so perfect. We here see, perhaps, the most striking illustration of DARWIN'S "Theory of Selection" carried into practice. It must have been through the most rigorous selections of sires and dams, pursued through many generations, that the truly noble Hereford bull of the present day owes his existence; for the breeder and the ethnologist well know that no amount of culture and care bestowed upon cattle will avail to improve the breed beyond a limit soon reached, unless, at the same time, the most skilful attention be paid to the laws of hereditary transmission and the development of desirable peculiarities by repeated selection. But breeding is not all. We look again with the eye of the physician, and are satisfied that those rounded muscles, that well-moulded bone, those brilliant eyes, and that faultless hide, would never have acquired, in so high a degree, the characteristics of health had not the animals been carefully fed, kept scrupulously clean, and well housed. We have here abundant proof that the hygiene of the stable is thoroughly understood. Is the hygiene of the cottage understood as well? By very many liberal landlords we know that it is. But recent revelations, and facts with which medical practitioners are familiar, prove too clearly that a large proportion of our agricultural labourers receive infinitely less care as to their food, lodging, and clothing, than do the cattle they tend.

Without adopting altogether the maxim expressed in JOHNSON'S celebrated bucolic,—"Who drives fat oxen should himself be fat,"—we cannot help wishing that the drover were as well fed and as well housed as his cattle. We do not wish to apply to him those principles of "selection" which regulate the breeding of the higher kinds of stock, human and pecudal. As a rational being, living in a country and an epoch remote from those of Mr. CARLYLE'S hero, FRIEDRICH WILHELM, he cannot be subjected to matrimonial restrictions with a view to the propagation of a race of giants. Indeed, the blood of the English agricultural labourer scarcely needs the solicitude of the breeder. What is wanted is some attention to his moral and physical wants, and especially to the latter, as being the readiest means of improving the former. It has lately come to be a question, whether the mass of agricultural labourers who pursue their calling under the pure canopy of heaven, surrounded by all that we consider conducive to the preservation of health, are really longer lived or so healthy as the inhabitants of our populous towns. We hear of whole villages, occupying the loveliest sites, being ravaged by fever; we see men, in the prime of life, bowed down with rheumatism, with chests contracted by phthisis, prematurely old from living in overcrowded rooms in cottages ill-built and ill-drained. We are told of families, consisting of six or seven persons, driven by their own poverty or sympathy for that of others, to take in grown-up lodgers to share with them the comforts of a room perhaps eight feet high by ten feet square. Knowing these things, can we wonder at the results: a degenerate race, sickly in body, broken in mind? The agricultural labourer of to-day will not, indeed, look back with envy upon his predecessor, the Saxon ceorl, who wore the badge of his owner round his neck; but we think he may well regret the fortune of his fathers who sat at the same board with their master, slept perhaps under the same roof, and, at any rate, were not indecently and unhealthily crowded together at night like swine in a sty. Why should the condition of the labourer be so abject and so wretched now? We believe the root of the evil is the law of settlement, and the present constitution of the Poor Laws. The parochial system is carried to excess. We see no reason why all that is characteristic of the English Constitution, as exemplified in local self-government, should not be maintained intact without oppressing and harassing the rural labouring classes as is now the case. We have on several former occasions pointed out in this journal how pernicious and unjust is the system of regarding the inhabitants of every parish in the kingdom as so many isolated communities which can only maintain their rights or their existence by treating each other as aliens. The system operates, as everyone must admit, in favour of the rich, and to the detriment of the poor and helpless. Who does not know of examples of estates that have been cleared, or kept clear, of small tenements with the avowed object of driving away elsewhere—anywhere—the labouring poor, who might become a burden upon the rates? Who does not know of instances of poor workmen condemned to trudge many weary miles to and from the scene of their employment, because that lay in an inhospitable parish, the maxim of whose guardians it was—to use the labour they wanted, but to keep paupers at arm's length? Who does not know that the direct consequence of this artificial paucity of humble dwellings in certain localities has been the overcrowding and the attendant moral and sanitary evils which are now the topic of public scandal? Let no man who raises his voice against that most Christian and most

politic measure, the equalization of the Poor-rates, forget that it is a question of far higher importance than an equitable adjustment of taxation to property; let him remember that it is a question which, as it affects the health, the morals, the content of the labouring classes, concerns the prosperity, the credit, and the safety of the nation.

There is only one thing which has astonished us more than the supercilious tone in which this question has been constantly pooh-poohed by wealthy proprietors in and out of Parliament. It is, the pharisaical indignation of lightly-burthened ratepayers in fashionable parishes, where palaces have been reared on the sites of hovels, at the tales of misery, of starvation, of repulse from workhouse-doors, in those parishes where almost all the inhabitants are poor or struggling, and who yet, out of their scanty cruise of oil, are compelled to support the poor ejected from neighbouring parishes.

We earnestly trust that in the ensuing session of Parliament this great question will be looked upon from a higher ground, and with a more liberal spirit, than heretofore. In the meantime, we hope that no effort will be neglected to mitigate the crying evils of overcrowding, by applying such remedies as are in our power. It may be useful to call to mind that, in an Act passed last session, Boards of Guardians were empowered to commission their medical officers as officers of health, and to obtain from them, in this latter capacity, reports as to the sanitary condition of their parishes. We never expected much good from this enactment; but, at all events, its efficacy ought to be tested. Then there is the Nuisances Removal and Diseases Prevention Act. There are clauses in this Statute which, where local authorities exist, and are in earnest, may be most usefully applied in mitigation of this grievous scandal and disastrous nuisance.

THAT Her Majesty's Royal Warrant of the 1st of October, 1858, should not yet have been applied to the Service in India, though at once recognised, and put in force throughout all other portions of Her Majesty's dominions, seems most incomprehensible. The injustice of its non-recognition we know is severely felt, more especially by the junior members of the profession sent out to India and China in ignorance of the treatment that awaits them on their arrival. They then find that a lower rank and a less pay are assigned them, pending a vacant medical charge, than they would receive in England or the Colonies. The state of the Medical Service in India, as compared with that at home, demands the very serious consideration of educated medical men, before they allow themselves to join it; for good faith, and even written contracts, are apparently no impediments in the way of whatever changes those in authority think fit to impose.

It is amongst the medical officers of Her Majesty's local Indian army that the strongest reasons for complaint exist. They have, by a special Warrant of Her Majesty, dated 13th January, 1860, been placed in a position very inferior to that of their brethren in Her Majesty's British Service, in regard to rank and pension. This, too, in defiance of the Warrant which was intended to place them on the same footing, and to confer on them privileges similar to those possessed by the imperial servants. The grievances of the Indian Medical Service are too numerous for us fully to describe; but they will be found more or less detailed in the several memorials which have been sent home. At a time when plans are being formed to amalgamate the Indian with the British army, surely it is desirable that attention should be drawn to the Indian Medical Service, which is an integral portion of the Indian army.

The number of European medical officers at present employed is about 1000, and of native subordinates, such as sub-assistant-surgeons, regimental apothecaries, and warrant officers, there cannot be less than 2000. The following table will show the exact numbers and proportions of surgeons and assistant-surgeons at each of the Presidencies now on the list:—

			Proportion of Assistant-surgeons.
Bengal	Surgeons	140	2·07
	Assistant-surgeons	290	
Madras	Surgeons	76	2·10
	Assistant-surgeons	167	
Bombay	Surgeons	55	2·72
	Assistant-surgeons	150	
		878	

The seniors on these lists at each Presidency fill the administrative offices, and superintend the executive officers; promotion, as a rule, proceeds by seniority. The Indian Medical Service was at one time eagerly sought after; but the attractions it possessed in former years have gradually disappeared, and at the present day there is great difficulty in finding properly-qualified candidates to fill vacancies. The cause of this change must be looked for in the Service itself; in the systematically unfair way in which it has of late years been used, in the abolition of numerous privileges and sources of emolument, and in the petty retrenchments of pay and allowances to which it has been subjected. Other causes may be found in its members being deprived of the privilege of retiring pensions according to *rank*—a privilege still enjoyed by Her Majesty's Indian and British Services, naval as well as military, and in having a scale of pensions by *length of service* only allowed to them; and in the scale being inferior to that of pensions previously assigned to military officers, who necessarily enter the Service at an earlier age, without having had to incur the serious expenses attendant on a professional education. But the greatest grievance of which they have to complain with reference to pensions, is that the new scale—that depending upon length of service—has been made to have a retrospective effect on those who entered it previous to these rules coming into force, and of whose covenant it did not form a part. Insult has been added to injury, for the various memorials and representations of the injustice inflicted on their medical officers have met from Government with the most discouraging and degrading reception. In his late Minute, that greatly distinguished officer, General OUTRAM, when noticing the depressed condition of the Service, bears testimony to the correctness of the statement made by a late Physician-General, who was at the head of the profession, that "had any officer treated his dog-boy in the manner in which "the Court of Directors, shortly previous to its dissolution, had "treated their Medical Service, he would have been brought "to a court-martial, and cashiered for dishonourable breach of "faith." The illustration was a strong one, but after explanation, its justice was admitted by the Commander-in-Chief, who thenceforth felt as warmly on the subject as the head of the Medical Department. There can be no doubt that one of the chief causes of the deterioration of the Service was the change made in the retiring regulations in the year 1842. Prior to

that year the pensions of medical officers were regulated according to the rank attained. Previous to the 16th of July, 1842, medical officers had been able to retire after twenty-five years' service, on adequate pensions, and at a reasonable age. Since then length of service has been the rule.

The immediate effect of these new rules forced upon the profession has been to prolong the period of service required to qualify for a retiring pension. The consequence, in a seniority service like the Indian, is to delay the period of retirement of the seniors, and to unjustly retard the promotion of the juniors. In this service, the present rate of promotion to the rank of surgeon is from seventeen and eighteen years, whilst in her Majesty's British Army the present average rate is from eight to nine years only. There are at present officers of thirty-five and even of forty years' standing on the Indian list, who continue to serve in order to become entitled to the present rates of pension. Years of absence on sick certificate do not count as service. What adds to the injustice of these new rules is, that the privilege of retiring pensions according to the *rank* attained is still enjoyed by all combatant officers. Their scale of pensions for length of service is also more liberal. An officer can retire on the pension of a major (£292) four years after being entitled to that of a captain (£191), and on the pension of a colonel (£365) four years after that of major. A medical officer, on the contrary, has to serve eight years after being entitled to the pension of a captain before he can retire on the equivalent of a major's pension, and twelve years before he can retire on that of a lieutenant-colonel. It is true that the scale of medical pensions commences by allowing the pension of captain to a medical officer after three years' less service than a military officer; but then the same scale requires one year's longer service from a medical officer to qualify him for the equivalent of a major's pension, and for that of a lieutenant-colonel, than is required of the military officer, as is shown by the following tables:—

Medical Pensions by Length of Service only.

After 17 years	...	...	...	£191
,, 20 ,,	...	...	...	250
,, 25 ,,	...	...	...	300
,, 29 ,,	...	...	...	365
,, 32 ,,	...	...	...	500
,, 35 ,,	...	...	...	700

Military Pensions by Length of Service, and according to their Rank, after Twenty Years' Service.

After 20 years	...	...	£191 (captain's pension.)
,, 24 ,,	...	...	292 (major's ditto.)
,, 28 ,,	...	...	365 (lieut.-colonel's ditto.)
,, 32 ,,	...	...	456 (colonel's ditto.)

Regimental colonel's retired allowances £1056.

Whatever may be the pecuniary saving to Government from these new pension rules (and it is very problematical if it is at all considerable), it can be as nothing when weighed against the feeling of discontent and dissatisfaction, amounting almost to disaffection, which they have created throughout the whole service. It behoves Government, therefore, as a purely defensive measure, if for none other, to rectify them.

There are many other grievances of which the medical officers of India justly complain. These were forcibly and emphatically brought to notice by the Minute of the Marquis of DALHOUSIE in 1856. Remedies complete and satisfactory were suggested, and a scheme of organization proposed and drawn up, which, if carried out in its details, would have done justice to the service, and rendered it second to none in the world. Unfortunately, the Chairman at that time of the late East India Company had neither the generosity nor the wisdom to acknowledge its merits, and so it remained nearly a dead letter. He could not see the necessity of securing to the medical officers the advantages contemplated by its author, or of removing that feeling of discontent with their position which still presses like an incubus on them, cramping their energies, and, with "hope deferred," making "their hearts sick."

THE Shoreditch Board of Guardians have, we learn, suspended the Medical Officer of their Workhouse; and, in conformity with one of the most useful prerogatives of the Poor-law Board, they have transmitted to this body a statement of the reasons which have led them to adopt this step. What are these reasons? Three instances are set forth, in which they charge their medical officer, Mr. JAMES CLARK, not with neglect of duty, not with professional incompetency, but with excess of zeal in prompting the holding of inquests upon the bodies of paupers dying in the Workhouse. These charges will, of course, be investigated by the Inspector of the Poor-law Board, Mr. FARNALL, who had already given notice of his intention to institute an inquiry into the grounds of the censure declared against the Guardians by Coroners' juries, for neglect and harsh administration of their duty towards the poor. In the absence of evidence, we cannot discuss the merits of the charges against the Guardians, or of those against the medical officer. This part of the question Mr. FARNALL'S inquiry will no doubt elucidate. But what is the *primâ facie* conclusion that impartial observers must draw? Were the Guardians, smarting under the public exposure of their own shortcomings, roused to vent their anger against the person whom they suspect to have instigated the damaging inquests? Are they seeking to make a scapegoat of the doctor? It really looks very like it. The course they have adopted bears the aspect of a determination to intimidate anyone holding office under them from taking any part in the promotion of an inquest, or even from giving evidence before one. In so odious a policy, they will meet with little sympathy from the public. It may be their opinion, and the evidence brought before the Coroner may support that opinion, that the particular inquests they accuse Mr. CLARK of instigating, were unnecessary; but, as a general principle, it ought to be remembered, that every person dying in the custody of others, whether private individuals or public bodies, ought to be the subject of an inquest. Every prisoner dying in a jail is entitled to an inquest. Shall the pauper be denied that protection which is accorded to the murderer? What will be the condition of the pauper if Guardians are to dismiss their medical officers, and intimidate everyone under their influence, for simply submitting to the Coroner's constable, that in certain cases inquests ought to be held? This is the public aspect of the case at issue between the Shoreditch Guardians and their medical officer. It is one which cannot be evaded. The eyes of the public and of the whole medical profession will be fixed upon the double inquiry which Mr. FARNALL is about to commence.

THE DEGENERATION OF RACE.

LONG and ample observation has sufficiently shown to physicians, to historians, and to ethnologists that marriages of consanguinity lead to the intellectual degradation and phy-

sical degeneration of the offspring of such unions. The facts revealed by Ellis, Spurzheim, and Esquirol, displaying the frequency of mental alienation, and its hereditariness in the great families of France and England, are parallel with similar evidence collected amongst the middle classes. The rapid extinction of exclusive aristocratic families has become a common-place in modern times, which finds its correlative conditions in the history of the Spartan people, who would have perished entirely but for fresh blood drawn from amongst the Laconians. Some interesting isolated facts in history afford a sufficient answer to that noble apology for the gradual extinction of aristocratic families which ascribes it to unusual number of deaths by battle, fire, sea, and sword in the service of their country. In 1583, the Council of Berne accorded rights of *bourgeoisie* to 387 families. It was a fatal gift. Within two centuries 279 of those families died out. But the lessons which history teaches, which physiology enforces, and to which time has but added new authority, are easily disregarded when the individual, seeing in such unions a sure means of preserving within a limited circle great wealth or noble titles, adding new possessions to his line, or perhaps of satisfying a blind affection, trusts to the operation of what he regards as chance to exempt his offspring from evils which fall only upon a proportion of the children born to parents allied by blood. It is no doubt to this reasoning that we must attribute the very numerous marriages of consanguinity which we daily behold, and it is to this doctrine that we owe also a large proportion of the idiots, the epileptics, the scrofulous, the rachitic, the enfeebled, and the incapable, who afflict and burden the nation. But there is a deep-lying fallacy in this reasoning. Physical laws are not capricious in their working, although they are often variable in their manifestations.

It is not to be supposed because all children springing from such unions are not the subjects of idiocy, of paralysis, or of rickets, that the law of physical degradation has, therefore, been defied with impunity. A man so begotten may be distinguished for his intelligence and for his fine physique, and others may point to him as an example contradicting the alleged evils of consanguineous marriages; but it is not so: Nature cannot contradict herself. Examine first all the children of such unions in a limited circle, and by the light even of a few score of facts these apparent exceptions may be interpreted and placed in harmony with the great historic law, which knows no exception and no change. For an instance, we may use the last series of facts collected by Dr. Bemiss relating to 34 such unions. Of these 34 marriages, 28 were between cousins of the first degree, and 6 between cousins of the second degree. Of the 34 instances, the union was 7 times barren, 27 times fruitful. The 27 fruitful marriages produced 191 children. Of these 191 children, 58 died shortly after birth. In the 24 cases in which the cause of death was indicated, phthisis occurred 15 times, water on the brain once, convulsions 8 times. Of the remaining children, who advanced to adult age, 32 were indicated as of unsound constitution and habitually sickly; 47 were deformed or afflicted by more or less grave constitutional diseases; of whom, 23 were scrofulous, 4 epileptic, 2 of unsound mind, 2 mutes, 4 idiots, 2 blind, 2 deformed, 5 affected with albinism, 6 with weak eyes, and 1 with chorea. Of 9 no details could be obtained. Only one-fifth remain, who were described as apparently healthy and sound. But we must remember that the seeds of disease are slow to germinate, and may possibly be restrained from development by skilful management, fortunate circumstances, and care; and that men grow accustomed to their infirmities until they cease to note or regard them, and learn to look upon their cramped energies, their limited power of endurance, their special points of weakness, and compelled observances and self-denial, as a normal state of being. We shall, then, from this consideration, put less faith in the favourable report, even as to the high standard of health of this small and favoured remnant. Physiology teaches us, too, to recognise that the laws of Nature work secretly and silently, but not capriciously. If it be once ascertained, as these and similar researches have established,—not to speak of historical evidence,—that the intermarriage of blood relations is a condition which injures the production of healthy children, it is perfectly certain that not one of the children, offspring of that union, can escape from that law; and that although opposing influences may favour them by counterbalancing or restraining the development of their sources of weakness and degeneration, yet they are placed under disadvantages from which the children of parents derived from a strange stock are wholly free.

The recent exposition of the vast and afflicted population of Great Britain now suffering from idiocy, paralysis, epilepsy, rachitis, and scrofula, whose lamentably destitute condition has been lately described in these columns, cannot but enforce the necessity for increased study by medical practitioners of the causes of these hereditary scourges. Marriages of consanguinity play an important part in their production, and by studying this subject, each in his own sphere of observation, physicians might contribute valuable series of facts to the public store, while they acquired striking instances with which to enforce their warnings against unions which people this world with a population such as the imagination of Dante figured with horror in the dark abodes of his "Inferno"—a population which bewails its birth, its existence, and its offspring.

GARIBALDIAN MEDICAL ORDERS OF THE DAY.

THE services of the medical staff of armies are rarely noted or rewarded with the warm gratitude which their value demands. It is only recently, and after incessant reclamations, that commanders have consented to place this important though non-combatant part of their force on an equal footing with the rest. When Lord Palmerston proposed to Parliament, at the conclusion of the Crimean war, that the medical service should be included in the vote of thanks, he had to justify, if not to apologize for, an unprecedented innovation. The subjoined Medical Order of the day, of which we furnish a translation, issued by Dr. Ripari, head of the staff of Garibaldi's army, is interesting in this relation, while as a literary document it is in many respects unique:—

"ORDER OF THE DAY.

"The battles are over which have been fought by the great Captain of our times—the pride, the love, and the hope of the people,—and for which, by those who shall call us ancient, we, Italians of the nineteenth century, will be looked upon as the redeemers of the national honour.

"The world had hardly been apprized of the hazardous attempt of a thousand resolute men, answering the call of their great leader, and landing on the coasts of Sicily to put down the worst of all tyrannies—the Bourbonic tyranny, than it heard successively the news of the victory of Calatafimi, the capture of Palermo, and, in less than two months, the march through the Calabrias, and the victorious entry of the deliverer within the walls of Naples, amidst the enthusiasm of the people.

"An Italian king, a brave soldier, and a worthy descendant of the house of Savoy hastened to our aid with a portion of that army which has always maintained the honour of Italian arms, and, espousing the cause of the people at Ancona and Capua, has given as a bridal present to the free Italian Unity—after Milan and Florence—Naples, the richest, the most brilliant jewel of the whole Peninsula.

"Honour to the first king who has offered his hand to the people! Sublime compact accomplished in Italy—the land that promises to become, for the third time, the redeemer of humanity!

"To you, medical men and surgeons of the army of the Two Sicilies, who took such a noble part in the great struggle, to you I address myself for the first time, though in every emergency you have always discharged your duties on the field and in the hospitals with so much skill and devotion; to you I speak for the first time, and declare you the sanitary corps which more than any has deserved well of the country. Nor do I hesitate in calling you a most efficient army sanitary corps in point of science and skill, while you number amongst yourselves

such divisional surgeons as Dr. Ziliani, Dr. Braico, Dr. Denaro, Dr. Marozzi, Dr. Gemelli, Dr. Morosi, Dr. Albanese, Dr. Monastieri, Dr. Stradivari, Dr. Sacchi, Dr. De Vita, Dr. Franklin, Dr. Mackenzie; and while all the divisional surgeons in active field service incessantly speak with the highest satisfaction, in their reports to me, of the regimental and other surgeons under them.

"The many difficult operations performed on the field of battle and in the provisional hospitals give ample evidence of the skill, calmness, and courage of the surgeons, who have been repeatedly called to exercise their office under the enemy's fire; and amongst others, the young Dr. Cipolla, under head-surgeon, Dr. Basile, 1st class captain and staff-surgeon, and Dr. Maltese, regimental surgeon in the camp hospitals reserve, have particularly distinguished themselves. Dr. Papa, 1st class chemist, deserves also honourable mention for his ability and courage.

"I express, then, my sincere thanks to the Sanitary Corps of the Southern Army of the Two Sicilies, whose skill, devotion, and tender feeling, exercised in the performance of its duties during the fatiguing campaign, have rendered considerably easier my onerous charge of Chief of the Medical Department; and I thank it as well in the name of the Great Chief who has led us to victory, in the name of Italy redeemed, and also of that remaining portion which ere long shall be redeemed!

"DR. PETER RIPARI,
"Naples, Nov. 9th, 1860." "Chief of the Medical Department.

FEVER IN STREET CABS.

ONCE more we desire to call attention to a hygienic precaution of great public moment, and for which the law has now provided. The conveyance of patients affected with fever, small-pox, and other infectious diseases, in street cabs, which are subsequently hired by all comers, is an unseemly and dangerous practice. It cannot fail to favour the spread of these infectious diseases. The employment of these vehicles for the conveyance of hospital and workhouse patients suffering from many other maladies and sores not zymotically infectious or contagious, although less threatening to the health of those who succeed them in the cab, is not less an outrage on propriety. We have often urged these considerations, and some few vestries and public bodies have voluntarily provided carriages suitable for the purpose, such as have been described in former articles in this journal. These steps have been taken under circumstances of more or less difficulty. All difficulties should now cease. The Legislature, by a clause in the Nuisances Removal Act, passed at the end of last session, authorized, although it refrained from compelling, the guardians and overseers of the poor to incur the expense of supplying and maintaining a proper carriage for the conveyance of persons so diseased, and providing for the expenses so incurred. We entertain a confident hope that they will be sufficiently influenced by the advice of their medical officers to adopt the means recommended for the abatement of this alarming practice. There are two hospitals in London devoted to these diseases; these are the Fever and the Small-pox Hospitals. At the Fever Hospital, the governors are very anxious to provide such a carriage for the conveyance of patients; and a benevolent gentleman has offered to contribute thirty guineas towards this object, provided a sufficient fund be raised. More than once patients have been received there in a dead or moribund state, and commonly greatly injured by conveyance in a carriage so ill-adapted to their weak condition as the ordinary street cab, while they have left behind them that which may have proved to be a legacy of disease or death to the next occupant of the vehicle. The public owe it to themselves and to humanity to put an end to a practice which is at once dangerous, disgusting, and cruel.

Let us add a word for those whose injuries are serious only to themselves, and whose suffering would very often be strikingly alleviated if such a conveyance were at hand in suitable localities. In London alone last year, some 1937 persons met with death by fractures, dislocations, and other violent accidents. How many more suffered such accidents and recovered it is hard even to guess. At one London hospital only last year, 1263 persons were brought to the surgery suffering with fractures, 3471 with contusions, 1521 with dislocations, and 49 with concussion of the brain or internal organs. How were these patients conveyed? By much the larger proportion of those wounded by severe accidents are brought in cabs. The police evade the duty of bearing the hurt in slings or otherwise, and contrive to have them sent in cabs.* When examined, there is found, perhaps, a compound fracture of the leg, the fracture the result of the accident; but as to the serious complication by which the sharp end of the bone has cut through the skin, or lacerated the muscles, and converted the simple fracture into a dangerous compound fracture, the question must too often be asked whether it is not due to the rough handling or the rough conveyance of the unfortunate patient. Every house-surgeon in London will endorse this statement, which in itself is an affecting appeal in favour of the provision of proper conveyances at suitable stations.

A DEBT RECOVERED.

"ACCIPE dum dolet" is the maxim addressed to all practitioners of medicine by those experienced in the world and its ways. No doubt, those who act upon it find their account in avoiding all accounts, and so escaping "bad debts." When the pain is past, the pence are too often begrudged; and the doctor, when his duty is accomplished, becomes the dun, to be treated as some men will treat their creditors. "Bad debts" form, we fear, a very unpleasantly large item in the accounts of many able and hard-working practitioners. For them the subjoined little history will have a special interest; but obviously it affords an example not to be followed without great caution.

Mr. Loadman, a country surgeon, having attended a Mr. Neville (independent), sent in his bill, but was not paid during five years. He heard it announced that Mr. Neville was going to reside in Normandy for two years, and, in order to get the money, issued a *capias*. Mr. Neville paid the amount to the sheriff, and got the *capias* set aside. On Wednesday, he brought an action against Mr. Loadman for the arrest, and the jury found a verdict for the surgeon on the ground that, having been informed by tradesmen that Mr. Neville was going away, he had caused him to be arrested, without any malice, simply to get his money.

SCIENCE AT THE BOTTOM OF THE SEA.

DR. C. WALLICH, who accompanied the recent expedition to survey the projected North Atlantic Telegraph Route between Great Britain and America, has brought back some important notes of new facts in natural history which he has ascertained. His main object was to determine the depth to which animal life extends in the sea, together with the limits and conditions essential to its maintenance.

He has proved that at a depth of two miles below the surface animal life exists. Here, where the pressure is calculated to amount to at least one ton and a half per square inch, and where it can hardly be conceived that the most attenuated rays of struggling light can penetrate, Dr. Wallich has not only discovered the minute infusorial Foraminifera, whose calcareous envelopes protect them from pressure, and whose organization is of the simplest, but he has obtained from a sounding, 1200 fathoms deep, a number of star-fishes (genus Ophiocoma) adhering to the lowest fifty fathoms of the deep sea line, which must have rested on the bottom for a few minutes, so as to allow those star-fishes to attach themselves to the rope; so that it is now established that in these regions of watery desert and everlasting darkness there exists "a highly organized species of radiate

* Roberton on Hospital Accommodation, "Transactions of the Manchester Statistical Society, 1860."

animal, living, entwining, and flourishing, with its red and light pink tints as clear and brilliant as its congeners which dwell in shallow and comparatively sunshiny waters." Others, doubtless, exist; for this is but a first inquiry so conducted, and in time we may come to hear of a new submarine fauna, peopling these dark abodes, and preparing this subaqueous floor just as the land on which we now walk, once submerged, is believed to have been prepared. It is said of Dr. Wallich's researches that science is now where its friends and enemies would alike wish it to be—at the bottom of the sea.

THE COLLEGE OF SURGEONS AND VACCINATION.

THE Committee appointed by the students of the Middlesex Hospital Medical College (at a meeting held on the 3rd inst., to consider the advisability of memorializing the Royal College of Surgeons in connexion with the new regulation of that body in respect to vaccination) present their compliments to the Editor of THE LANCET, and request the favour of the insertion of the following resolutions, and of a copy of the memorial, which has been drawn up and signed by upwards of three-fourths of the students. The Committee, while approving of and adopting the memorial of the Manchester students as a *whole*, have thought fit to omit and alter *certain* clauses, and to insert others which seem to them to bear more directly upon the point at issue. In the course of the debate which took place at the meeting, one gentleman suggested that the new regulation was encouraging *that* of which most of the Council have so lately expressed their strong disapproval—namely, *special* teaching at *special establishments*.

RESOLUTIONS.

Moved, seconded, and carried by a large majority—1. "That this meeting considers that the move made by the Manchester Medical Students, concerning the new regulation of the Royal College of Surgeons respecting vaccination, is one deserving the approbation of students of all schools, and that, therefore, a memorial to the same effect as that published in THE LANCET of the 8th inst. be drawn up, signed, and presented by the students of this school."

Moved, seconded, and carried unanimously—2. "That a committee, consisting of the Chairman of this meeting and four gentlemen (named by the proposer), be appointed to draw up a memorial, which shall be laid on the library table, to be signed by as many students as shall think fit."

3. "That a copy of these resolutions, and of the memorial, be forwarded to every metropolitan medical school, and to the various medical journals."

(COPY OF THE MEMORIAL.)

To the President, Vice-President, and Council of the Royal College of Surgeons of England.

We, the undersigned, students of the Middlesex Hospital Medical College, beg leave to call the attention of the Council of the College of Surgeons to the fact, that the regulation concerning vaccination, issued by the Council in August last, presses harshly on a great majority of the students of medicine and surgery.

By this regulation, all who present themselves for the examination for the diploma of the College are required to possess a certificate of proficiency in vaccination. This certificate can only be obtained by attendance for six weeks at an Educational Vaccination Establishment removed from the hospital. In addition to the time spent in this attendance, all students are obliged to pay an extra fee for the certificate, an expense which, though trifling in itself, is one which, since the regulation is made *retrospective*, those who commenced their professional education previously to the present session by no means anticipated.

We beg leave to submit to the consideration of the Council that by far the greater proportion of us have already been instructed in the theory and practice of vaccination by the surgeons with whom we have been resident, as pupils or assistants, many of us throughout a period of several years, and that these surgeons, both from their general professional education and from the number of vaccinations they have annually to perform, may be considered fully qualified to give instruction. The student who has for years been constantly engaged in the practice of vaccination, under the superintendence of such surgeons, can hardly be expected to derive much benefit from six weeks' teaching by the Educational Vaccinator.

Your Memorialists, therefore, pray, *not* that the regulation be rescinded, but that a certificate from a practitioner, with a registered surgical and medical degree, be received from those students who have already studied vaccination; and that as the knowledge of vaccination should, without doubt, be imparted to all students of medicine, it be taught, not at *special* establishments by *special* teachers, but at the school at which we study, by our own lecturer on midwifery and diseases of women and children.

And your Memorialists will ever pray, &c. &c.

MEETING OF THE

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

DEC. 15TH, 1860.

THE following Report was read from the General Purposes Committee:—

"The Committee met on Monday, the 10th instant, at Dr. Ansell's, Bow, to investigate certain cases of disease brought under their notice by Dr. Elliot, Medical Officer of Health for Stratford. The Committee proceeded to Forest-lane, the locality in which the cases had occurred, accompanied by Dr. Elliot and Mr. Hamilton, under whose care most of the cases had been.

"Forest-lane is about two miles north of the Thames, situated on a gravelly soil, recently built over, with roads but imperfectly made, and, in the neighbourhood of the houses visited by the disease, covered with stagnant water. There is no drainage, except into open cesspools at the rear of the houses. It is about twenty-five feet above the Thames, and two miles distant from the scene of an isolated outbreak of cholera investigated by the Association in the autumn of 1858.

"It appeared on inquiry, that scarlatina and measles, and severe sore-throat, were very prevalent in the district. The fatal cases specially inquired into, three in number, were as follows:—

"The first was that of a boy, aged seven years, at 11, Chatsworth-road, who, after slight indisposition, lasting a day or two, was seized, on the 1st of December, with bilious diarrhœa and vomiting, accompanied by delirium and great prostration. He soon fell into a state of collapse, and, at the end of twenty-four hours, was dead. The water-supply of which he partook was from the East London Water Company. Not many weeks previously, the drains of Nos. 17, 18, and 19, in Chatsworth-road, had been stopped up, and the cesspool into which the three houses drained partially cleared out. Laundresses lived at Nos. 17 and 19.

"The second case was that of a boy, fifteen years old, living at Globe-crescent, in the immediate vicinity. On the night of Friday, the 30th ult., he was attacked with slight stiffness of the neck. The next morning he felt poorly, but went out to work. Soon afterwards he was seized with bilious vomiting, which lasted all day, accompanied by frequent purging, with bilious stools. He rapidly became exhausted. The next day he was drowsy; the purging had diminished, but the sickness continued, with great thirst. On the 3rd inst. he died in a state of collapse. The water-supply at this house was also from the East London Water Company. A specimen of it has been submitted to Dr. Dundas Thomson for analysis.

"The third case was that of a girl, aged five years, living at Edmiston Villas, another row of houses close by. At the rear of these villas is a potato-field, in which all the potatoes were extensively diseased, so much so that they were not worth digging up, and had been ploughed into the ground. The smell from this field in the autumn had been very offensive. The water-supply at this house was from a surface well, situated between the house and the field. This water, too, has been submitted to Dr. Thomson. The drains at the house next to the one in which this case occurred have been much complained of. At none of the houses were the sinks trapped. The little patient in this case had been feeling poorly a day or two, but went to church on the 2nd December; at night she was hot, thirsty, and very sick; her bowels had been confined for two or three days previously. The next day at noon her medical attendant saw her for the first time, and saw nothing in

her condition to excite alarm. There had been a little diarrhœa and sickness, with considerable prostration. At two A.M. on Dec. 4th the medical man was sent for, and he found her dying. In the house in which this girl died, a servant was suffering at the same time from ulcerated sore-throat and typhoid symptoms; but she soon recovered under the treatment of Mr. Hamilton.

"Careful inquiries have been instituted in reference to the food eaten by the several patients, but nothing which throws any light on the cases could be elicited.

"In none of the cases were there cramps, suppression of urine, or rice-water purging; nor was sore-throat or catarrh observed in either of them. In each case there was delirium at the onset, with bilious diarrhœa and vomiting, accompanied by prostration, soon passing into collapse."

A short discussion ensued as to the nature of these cases of death. The general opinion was that they were decidedly not cholera, but rather some form of fever, in which the patients died from the blood-poisoning before the characteristic symptoms had time to develop themselves. All who spoke thought that the undrained state of the land and houses must be regarded as an important element in the etiology of the cases. Dr. Elliot stated that badly drained as this part was, it was not so bad as very many parts of his district, especially the neighbourhood of Victoria Dock.

EDWIN CHADWICK, Esq., C.B., then read a paper on Public Schools, in which he maintained the following propositions:—That however good the sanitary condition of schools may be, however well they may be warmed, ventilated, and lighted, the common school time of five, six, or more hours of daily sedentary constraint required from young and growing children is injurious to their bodily development, and in violation of the laws of physiology. That any national system of education ought to provide, by systematized gymnastics, drill, and swimming-baths, for the physical as well as the mental training of children. That as schoolhouses are commonly constructed, and as schools are usually conducted, without regard to sanitary science, they are the frequent sources of disease, and of permanent bodily and mental infirmity, and tend, with over-sedentary constraint, to augment the excessive amount of infantile and juvenile mortality. That for the prevention of these evils, special applications of sanitary science and superintendence are required.

A short discussion ensued, in which several members and visitors expressed their concurrence with the views of Mr. Chadwick, and the debate was adjourned till the 19th January.

Correspondence.

"Audi alteram partem."

THE LATE ELECTION OF MEDICAL OFFICER TO THE LEDBURY UNION.

To the Editor of THE LANCET.

SIR,—Agreeably to an advertisement which appeared in THE LANCET of the 24th ultimo, to fill the vacancy of medical officer to the Ledbury and Yarkhill district in the Ledbury Union, I am instructed by the candidates then present to forward you a copy of a memorial addressed to the Poor-law Board, and to solicit the favour of your giving it a place in your valuable journal.

I am, Sir, yours, &c.,

December, 1860. F. J. ROBINSON, F.R.C.S., Hon. Sec.

(COPY.)

MY LORDS AND GENTLEMEN,—We, the undersigned members of the medical profession, being duly qualified under the General Consolidated Order of the Poor-law Board, having been invited by the annexed advertisement to compete for the office of medical officer to the Ledbury Union, and having attended the meeting of the Board of the above Union on the 11th day of December instant, at a considerable expense and loss of time; and after such attendance the Board of Guardians of the Ledbury Union did appoint a local and youthful candidate (Mr. Tanner), and who was only admitted as a Licentiate of the Apothecaries' Company on the 15th day of November, 1860, and who, out of the twenty-two candidates then in attendance, was the only one that did *not possess* the diploma of the Royal College of Surgeons of England.

We, the undersigned, under these circumstances, feel ourselves as professional men aggrieved and wronged. We therefore humbly pray of your honourable Board to appoint a Commission of Inquiry into this matter prior to the confirmation of the appointment of Mr. Tanner as their medical officer. Upon representing to the Board of Guardians of the Ledbury Union the unnecessary expense incurred by our being brought such a considerable distance, "at their request," they consented to refund the expenses we incurred in travelling, &c. &c., provided your honourable Board would sanction the disbursement.

I have the honour to be, my Lords and Gentlemen,

Your obedient and humble servant,

F. J. ROBINSON, F.R.C.S., Hon. Sec.
Senior Medical Officer to the Stepney Union.

To the Poor-law Board, Whitehall.

(Signed) CHARLES GRAHAM, M.B. Lond., M.R.C.S., L.A.C., L.M., *Dreadnought.*

HENRY EDWARDS, M.R.C.S., L.A.C., 7, Dorset-square;
Late District Medical Officer to the Wimley Hartley Union.

T. B. BEAMISH, M.D. Edin., L.R.C.P. Lond., L.R.C.S. Edin., L.M. Edin.;
Late Physician to the Ramsgate Infirmary, late of the Army Medical Staff.

F. W. RICHARDSON, M.D., M.R.C.S., L.A.C.;
Medical Officer of the East Woolwich District of the Greenwich Union.

SAMUEL A. RICHARDS, L.R.C.P. Edin. (by Exam.), M.R.C.S., L.A.C.;
Formerly House-Surgeon to Guy's Hospital, late Resident Medical Officer to the Leeds House of Recovery.

DELAMAR J. FREEMAN, L.A.C., M.R.C.S., Clayton-place, Kennington.

FRED. AUGUSTUS CRAMER, M.R.C.S., L.A.C., L.R.C.P. Edin.;
Late Surgeon to the U.S. Hospital, New Orleans.

WILLIAM SMITH, M.R.C.S., L.A.C.;
District Surgeon to Toxteth-park, Liverpool; late Medical Officer to the Bristol Workhouse.

CHARLES ROWLAND, M.R.C.S., L.A.C.;
Surgeon to the Bingham Union, Notts.

DAVID CORBETT, M.R.C.S., L.A.C., L.M.;
Medical Officer to the Ongar Union.

F. J. ROBINSON, F.R.C.S., L.A.C.;
Senior Medical Officer to the Stepney Union.

T. E. D. BYRNE, L.R.C.P. Edin. (by Exam.), M.R.C.S.;
Late R.N., Medical Officer to the Winlaton District of the Gateshead Union.

BARKER HILEY, M.R.C.S., L.A.C.;
Medical Officer to the Beghouse District, near Halifax.

JOHN R. STEADMAN, M.R.C.S., L.A.C., L.M., Newnham, Gloucester.

BONY CUP IN THE GLOBE OF THE EYE.

To the Editor of THE LANCET.

SIR,—Your impression of the 15th inst. contains a letter from Mr. Robert Taylor, referring to a report by Mr. Toynbee and myself on a bony cup in the fundus of the human eye, exhibited by Mr. Obré at the Pathological Society's meeting, Jan. 17th, 1860, and described in the "Transactions," vol. xi., 1859–60, pp. 226—229.

The nature of this bony cup was the question submitted to us. It was shown to possess true osseous characters, and its development was traced to the ossification of adventitious fibroid tissue lining the inner surface of the choroid in the neighbourhood of the foramen opticum. Specimens of this kind are of common occurrence, and have often been incorrectly regarded as ossifications of the choroid, of Jacob's membrane, of the retina, or even of the hyaloid membrane: but it is now a well-known fact that the natural structures of the eyeball rarely, if indeed ever, undergo conversion into bony tissue. With very few, if any, exceptions, these bony cups and scales occur in eyes which have been subject to deep-seated inflammation that has chiefly affected the choroid, and led to effusion upon its inner surface. In proportion to the extent and amount of the effusion, the retina is detached from the choroid, and pushed inwards towards the axis of the globe, at the expense of the vitreous humour, which simultaneously undergoes a corresponding decrease in bulk. The composition of this inflammatory effusion is not always uniform, but in different cases the proportions of plastic matter and serum vary greatly.

Sometimes the effusion consists almost wholly of an albuminous fluid, which seems incapable of organization; whilst in other instances the choroid is coated with layers of plastic lymph, which is converted into false membranes of considerable thickness; indeed, in some cases the whole of the space naturally occupied by the vitreous humour becomes filled by a solid fibrous mass, the axis of which is traversed by the detached and coarcted retina in the form of a slender stem, the extremities of which are connected with the optic foramen and the back of the lens. Ossification generally commences on the choroidal surface of these adventitious tissues, and extends inwards; more rarely, it takes place irregularly, and bony spicules shoot through the fibrous mass. Cases of this kind are not infrequent, but they have sometimes been described as ossifications of the vitreous humour and retina or choroid,—the coarcted, stem-like retina in the axis of the globe having been mistaken for the hyaloid canal. In order to show that these ossifications are not uncommon, Mr. Toynbee and I mentioned in our report on Mr. Obré's specimen two which I had brought under the notice of the Pathological Society in 1857 ("Trans.," viii., p. 319); and instanced, in the following words, a third, exhibited by Mr. Taylor for Dr. Kirk in 1855 ("Trans.," vol. vi., p. 300): "but in this instance the coarcted retina occupying the axis of the globe was mistaken for the hyaloid canal, and the bony spicules, erroneously figured as from the vitreous humour, really occurred between the retina and choroid."

Mr. Taylor says "that the *mistake* is on the part of Mr. Toynbee and Mr. Hulke;.....that there are no grounds for *accusing* Dr. Kirk of having found a hyaloid canal in the eye of a man fifty-three years of age;.....and that it is by no means certain that 'the spicules, figured as from the vitreous humour,' are described so erroneously."

In Mr. Taylor's description of the specimen ("Transactions of the Pathological Society," vol. vi., p. 300), it is stated that "the choroid adhered to a thin shell of osseous matter, occupying the position of the hyaloid membrane. Up the interior of this shell ran a tube, continuous posteriorly with the central artery of the retina, and opening in front against the capsule of the lens. Between this central pillar and the outer wall were numerous spicula of bone." These last are described in Plate xiii., Fig. 2, as "spicula of bone from the vitreous humour." From this it is obvious that Mr. Taylor and Dr. Kirk regarded the structures contained in the space between this central pillar and the bony shell lining the choroid as metamorphoses of the vitreous humour. Now if we exclude the cord-like scars which mark the track of penetrating wounds of the vitreous humour (as when a small shot has traversed the eyeball), and the membranous tube which encloses a cysticercus, neither of which had anything to do with Dr. Kirk's specimen, there are but two tubular or *pillar*-like structures that are ever found stretching between the optic nerve-entrance and the back of the lens—viz., the coarcted retina and the hyaloid canal. But it cannot be supposed that Mr. Taylor and Dr. Kirk recognised the retina in the *central pillar*, because it is impossible, under any circumstances, for the retina, however coarcted, to traverse the centre of the vitreous humour. Hence the fair inference that they mistook it for the hyaloid canal. That this was actually the case, I have the best grounds for knowing, because my friend, Dr. Kirk (now in Africa with Dr. Livingstone), whose attention I called to Mr. Taylor's description of his specimen, frankly acknowledged to me his mistake, and the correctness of my opinion, after having looked through my series of preparations and drawings illustrating the development of true bone and osteoid formations in the human eyeball. Of this circumstance Mr. Taylor is, doubtless, unaware. Whilst referring to Dr. Kirk's, amongst other, specimens, I took the opportunity, for truth's sake, of correcting an important error; but need not add, that I have not the slightest idea of *accusing* Dr. Kirk, whom I most highly esteem. Mr. Taylor's concluding remarks are quite irrelevant to the subject of the report, which was a bony cup in the fundus of the globe, and not an ossified (?) lens.

I am, Sir, yours obediently,

Old Burlington-street, Dec. 1860. J. W. HULKE, F.R.C.S.

THE QUESTION OF TITLES.

To the Editor of THE LANCET.

SIR,—I perceive by the last week's LANCET that the question of titles is still under discussion. One of your correspondents refers to the powers claimed by the authorities of the King and Queen's College of Physicians in Ireland of conferring the title of "Doctor of Physic" on its Licentiates. It appears, by a circular which I received a few days back (a copy of which I enclose), that Mr. Deasy, the Irish Attorney-General, is of opinion that they have the right of conferring the degree of "Doctor of Medicine." I think the London and Edinburgh Colleges of Physicians ought to follow the example of the Dublin College, by submitting their Charters, &c., to some high legal authority, such as the Attorney-General in England, the Lord-Advocate in Scotland, for their opinion as to the *legal* rights of their Licentiates to the title of "Doctor of Physic."

Yours, &c.,

December, 1860. L.K. & Q.C.P.

(COPY.)

King and Queen's College of Physicians in Ireland,
Dublin, Nov. 24th, 1860.

SIR,—I am instructed by the President and Fellows of the King and Queen's College of Physicians in Ireland to forward to you, for your information, the subjoined copy of the opinion of the Right Hon. her Majesty's Attorney-General for Ireland, as to the powers of the King and Queen's College of Physicians to confer the degree of Doctor of Medicine.

I have the honour to be, Sir, your faithful servant,

WILLIAM MOORE, M.D., Fellow and Registrar.

The two Charters of the College, and the several Acts of Parliament bearing thereon, having been submitted to the Attorney-General, his opinion was requested on the following query:—

"Whether the Licentiates, as such, of the King and Queen's College are entitled to the degree and title of Doctors in Medicine, and to use the abbreviation or initial letters M.D. after their names?"

ANSWER.

"I think the Licentiates and Fellows, as such, of the King and Queen's College of Physicians, as such, are entitled to the degree and title of Doctors in Medicine, and to use the letters M.D. after their names.

(Signed) "R. DEASY.

"November 21st, 1860."

THE COLLEGE OF PHYSICIANS AND SURGEONS IN GENERAL PRACTICE.

To the Editor of THE LANCET.

SIR,—From your leading article of last week, it appears that the College of Physicians are about to admit general practitioners under the title of "licentiates," without waiting for further legal advice, seeing that they have the power, by their bye-laws, to admit to *that* title whomsoever they choose, be they general practitioners or otherwise. But as we, the existing licentiates, stand in the way of such a change, we are, it appears, to be shelved with the empty title of "member." I take it that such is the case, from the printed circular lately sent to each licentiate by the Registrar of the College, together with a blank form, to be filled up and returned, should we wish to accept the title of "member;" if we decline to do so, we are to remain as licentiates. I would ask you, Sir, in the event of such a change being made by the College,—namely, the admission of general practitioners,—what would then be the position of those who refused to accept the title of "member"?

While I agree with you that the general practitioners should be admitted, in some shape or other, either as associates or licentiates, I think you will admit that to place us (assuming that we do accept the title of "member") upon the same footing with the general practitioners (for there is, in my mind, no proper distinction between the two titles "members" and "licentiates") would be an insult to the present licentiates or pure physicians, and a lasting disgrace upon the Council of the College.

If the Council and fellows of the College decide upon admitting the general practitioners, let them first admit their present licentiates to the fellowship, and then have but two grades—namely, fellows, and members or licentiates: the former, of course, to remain as pure physicians, the latter, general practitioners. It may be thought that young men wishing to become pure physicians could not possibly be at once created fellows. To this I would say that, if they are eligible for election as hospital and dispensary physicians, they should be for that of the fellowship of the Royal College of Physicians. But if there are objections to it, let there be two sets of fellows—say a senior and junior; this, I think, would get over the difficulty. As to the present licentiates, they are mostly men of standing in their profession, and nearly all physicians or

assistant-physicians to hospitals and dispensaries,—consequently, their elevation to the fellowship would be no disgrace to the present fellows.

A great deal more might be said upon this subject, but I feel I have already gone to too great a length for your columns.

I remain, Sir, your obedient servant,

M. D., LICENTIATE OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON.

Dec. 1860.

SPECIAL HOSPITALS.

To the Editor of THE LANCET.

SIR,—In order to prevent any misconception as to the *real* opinion of Sir Charles Locock (whose name appears in the list of protesters against special hospitals) with regard to hospitals for diseases of women and children, I beg to enclose, for publication in THE LANCET, letters from him on the subject. It will be seen that they are published with his sanction. We all admit the *abuse* that has recently arisen with regard to the establishment of hospitals for special diseases; but this is no argument against hospitals for the diseases of women and children, n a country like England, where in all our great cities and towns such large numbers of females are employed in the various manufactures, trades, and arts. The medical and surgical staffs of the *old* hospitals may not think any *new* hospitals requisite; but the public, as well as the profession, must be allowed to decide the question.

I am, Sir, your obedient servant,

Leeds, December, 1860. J. INGHAM IKIN, F.R.C.S.

(COPY.)

Holmewood, Tunbridge Wells, August 14th, 1860.

MY DEAR SIR,—Having left London some weeks since, your letter has followed me here.

Mr. Erichsen sent me the protest against special hospitals about a month ago, accompanied by Sir B. Brodie's letter, already in print. I signed the protest; but at the same time sent a letter to Mr. Erichsen, saying that I did so, only because I considered that there had been of late a great abuse in starting and maintaining special hospitals to a most unwarrantable excess; but that the same exception which Sir Benjamin Brodie had made in regard to ophthalmic hospitals, I still more emphatically made in respect to lying-in hospitals and those for the diseases of women and children. They did not choose, it appears, to print and circulate my letter of exception, as I suppose they thought many others would also have their own pet exceptions.

Yours very faithfully,

J. I. Ikin, Esq. C. LOCOCK.

(COPY.)

Brighton, December 13th, 1860.

DEAR SIR,—Your letter has followed me here. You are quite at liberty to make any use of my letter of August last, public or private, and my sentiments on the subject remain as then.

Yours very faithfully,

J. I. Ikin, Esq. C. LOCOCK.

*** The opinions of one so eminent in his department as Sir Charles Locock, are entitled to the greatest weight. But may not even he regard lying-in hospitals and hospitals for diseases of women and children from too special a point of view? The great gain we owe to lying-in hospitals is a knowledge of puerperal fever. But if lying-in hospitals had never existed, there would have been little puerperal fever. The hospital and the fever could well be spared. And the histories of the special hospitals for diseases of women in this metropolis do not particularly commend these institutions to professional approval. —ED. L.

MILITIA SURGEONS.

To the Editor of THE LANCET.

SIR,—Having seen in THE LANCET of the 15th inst. the statement, which appeared in some of the military newspapers, to the effect "that the Secretary for War had notified, in reply to the memorial of the surgeons and assistant-surgeons of Militia regiments, that commissions will be given to them in the Line provided they pass the necessary examinations," I think it only right to inform you, and, through your journal, my brethren in the service, that there is not a word of truth in that statement, which was inserted, as most of those articles are, without any authority for doing so. Immediately on my seeing it, I got one of my friends to make the necessary inquiries at the War-office, who was there told that nothing was known of such an offer, nor did they think there was any truth in it, as Mr. Herbert had not yet come to any decision respecting what he would do for the Militia surgeons.

Had there been any truth, however, in this statement, I need hardly point out to you that it would be no *boon* whatever, nor any answer to the memorial of the Militia surgeons to have their present position and pay improved; for were I or any number of my brethren to accept the offer, as the militia work must be done by somebody, successors would be appointed to our vacant regiments, and they would have to perform just the same duty, and for the same *inadequate* remuneration that has been the subject of our complaint to the authorities. Besides all this, no surgeon of Militia, with the number of years' service that I have had, would accept an assistant-surgeoncy, which is all that would be given to any of us. And there are two restrictions which, in nine cases out of ten, would be a fatal objection to our obtaining even this apparent boon: namely, our age, which must not exceed twenty-six; and we must be *unmarried*.

Hoping I have said enough to secure for us your valuable aid in our endeavours to obtain our just claims, and thanking you on behalf of my brethren for the repeated and valuable articles which have appeared in your journal,

I remain, Sir, yours obediently,

M. J. MACCORMACK, M.D.,

Spencer Villa, Southsea, Dec. 1860. Bedfordshire Militia.

PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

THE Academy of Medicine, the day before yesterday, held its annual public meeting, Professor Jules Cloquet being in the chair. A report on the prizes awarded in the course of the present year was read by M. Devergie, the secretary; and the subjects for competition proposed for 1861 and 1862 were announced. Amongst the prizes accorded were two sums of 1500 francs; and eight gold and two hundred silver medals to medical men and midwives, for services of different degrees of merit in generalizing vaccination. After these preliminaries had been gone through, the great event of the day, the eulogy of the late M. Achille Richard, the eminent botanist and professor of the faculty, was pronounced by M. Dubois, perpetual secretary to the Academy, and, by virtue of his office, panegyrist-general to this learned confraternity. Achille Richard, the object of M. Dubois' complimentary *critique*, belonged to a family already celebrated for more than a century in the annals of botanical research. As a zoologist, however, and not as a botanist, the first member of the Richard family known to fame made his *début*. This ancestor of the late professor was head-keeper of the Royal Menagerie at Versailles in the reign of Louis XIV. During the next reign, that of Louis XV., we find that a son of the zoologist, who had deserted the study of the animal for that of the vegetable kingdom, was appointed head-gardener of the Trianon. The king, at the suggestion of Lemonnier, physician to the royal household, formed the project of founding, in the grounds adjoining the latter palace, a school of botany; and the celebrated Bernard de Jussieu was entrusted with the classification of the plants in a mode adapted to the purposes of study. Jussieu called to his aid the head-gardener, this same Anthony Richard; and the famous catalogue, the "Genera Plantarum," was the result of their collaboration. The chief glory, however, of the earlier history of the Richard family was Anthony's grandson, Louis Claude Marie, who rose by his own exertions to the dignity of being a great and scientific botanist. Destined by an inflexible father for a career—that of the church—which he disliked, expelled from home for insubordination to paternal authority, young Louis Claude found himself at an early age forced to shift for himself, and, following the natural and hereditary bias of his tastes, pursued with ardour the study of botany. Having attracted, by some early works on the sexual apparatus of plants, the notice of the Academy of Sciences, Richard was charged by this learned body with a botanical mission to the tropics, and in

consequence passed several of the best years of his life in the swampy forests of Guyana and Brazil. Although he returned to France laden with the spoils of the tropical flora and with the most valuable materials for the illustration of the mysteries of the vegetable kingdom, yet, thinking himself, as he probably was, slighted by that scientific world for whose benefit he had been labouring, and in whose service he had sacrificed his strength of constitution, he resolved never to give to the public, but to keep to himself, the fruits of his travels. Achille Richard, the subject of M. Dubois' eulogium, was born April 17th, 1794, shortly after his father's return. He was destined to the career of medicine from an early age, and in 1814 entered the medical service of the hospital of Strasbourg. His next step in life was the acceptance of the curatorship of the rich private collections of M. Delepert, an appointment which eventually led to a similar position in the Museum of Natural History, and the Assistant-Professorship of Medical Botany at the Faculty of Medicine of Paris. On the death of Claude Richard in 1821, Cuvier, in pronouncing the customary eulogium in honour of the memory of the father, bore a flattering testimony to the rising talent of the son, and predicted the brilliant future reserved for him. It was not, however, until 1830, when the revolution subjected all the professorships to the test of the *concours*, that Achille Richard had an opportunity of contending for what in his family was an almost hereditary dignity. His success was never for a moment doubtful, and, distancing all rival competitors, he was installed in the post, so long the object of his ambition. As a teacher Richard was incomparable; he possessed the talent of charming whilst instructing his audience, and invested the driest details of his subject with an interest which impressed them on the memory of his hearers. Success is always the forerunner of detraction; and Richard, no exception to this rule, was not long without adversaries. One of the charges brought against him was the having separated botany from medicine, or rather the having curtailed the use of medicinal plants in their applications to the healing art. That Richard refused to accept the opinions of such authors of last century as Jean Batiste Chomel —who admitted no less than fourteen plants as specifics against cancer, fifty-one against epilepsy, and eighty-eight (!) against hydrophobia—is perfectly certain. That we have to thank him for unmasking the herbalist quacks, and divesting medical botany of its long list of simples and pseudo-remedies, is equally true. But that he ever attempted to rob Medicine of one of her most valuable handmaids is utterly false. Richard's main object in life, and one in which he in a great measure succeeded, was the concentration of the utility of medical botany. By a careful revision of the therapeutical virtues of each plant, and by the exclusion of all those from the materia medica the good effects of which were doubtful or unable to stand the test of experiment, he has rendered good service to the cause of practical medicine; stripping herbalism of its middle-aged costume, and assigning to botany a precise place amongst the collateral sciences subservient to that great purpose the furtherance of which is the legitimate end of our profession. To the student of medical natural history, Achille Richard has left a most valuable legacy in his "Elements d'Histoire Naturelle Médicale," a work now universally adopted as a class-book at the Paris Faculty of Medicine.

The Russian medical journals have lately published several cases illustrative of the good results of the external employment of tincture of iodine in acute superficial phlebitis. One of the examples cited is of sufficient practical importance to merit translation:—"A peasant, of robust frame, and of about thirty years of age, was attacked with pleurisy, and in consequence bled in the arm. During the evening succeeding the venesection, pain, redness, and swelling appeared both in the neighbourhood of the wound and over the surface of the limb. Five days after the bleeding, as these symptoms had progressively increased in gravity, resisting treatment, the patient was admitted into the Hospital Marie at St. Petersburg. Dr. Spoiret, author of the collection of cases, and chief medical officer of this establishment, found the whole arm enormously swollen, the skin tense and dark-red in colour; in the situation of the vein implicated was seen a broad line of a livid violet hue, to the touch feeling hard, cord-like, and pressure occasioning great pain. The swollen and discoloured track could be followed to the arm-pit, evidencing an inflammatory condition of the brachial vein. Violent fever was likewise present, with a hard wiry pulse, headache, thirst, and constipation. A treatment of leeching, mercurial unction, fomentations, purgation, and muriatic-acid mixture, pursued for four days, proving utterly ineffectual, the fever having increased in gravity, and symptoms of purulent infection setting in, a total change was ordered in the *régime;* and whilst sedatives were administered internally, free applications of tincture of iodine, renewed every three hours, were freely made along the whole course of the inflamed vein. At the end of two days the inflammation had considerably abated; a kindly suppuration commenced, and the case did well." Although bleeding, like duelling and such other relics of barbarism, is daily becoming less and less common in England, the one yielding to the advance of science, and the other to the march of civilization, and although the term "leech" is becoming daily less and less true in its application to members of our profession, still cases of phlebitis from superficial injuries in unhealthy subjects are far from being rare, and the above citation from the Russian medical *Zeitung* I deem quite worthy the attention of your readers.

The Local Societies for the Suppression of Quackery in France are quite on the alert, and I doubt not that ere long we shall see an afflux of hoary-headed bone-setters thronging the Quartier Latin, and taking their inscriptions, like the rest of us, in order, perforce, to make honest men of themselves. This may appear a joke; but I have been informed of two such improbable metamorphoses. The tribunal of Provins has just condemned, for illegal exercise of medicine, a somnambulist (an old offender) to the payment of fourteen fines of ten francs each for as many delinquencies, besides costs, and 200 francs damages to the Local Medical Society of the district. The cause of the legitimate practitioners was ably sustained by M. Andral (son of the celebrated Professor.)

The *Gazette des Hôpitaux* mentions that Drs. Conolly, Bucknill, and Forbes Winslow, have been named Associates of the Medico-Psychological Society of Paris.

Paris, December 17th, 1860.

Medical News.

ROYAL COLLEGE OF SURGEONS.—The following Members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery, at a meeting of the Board on the 19th inst.:—

Armstrong, John Christopher, Gravesend; diploma of Membership dated May 16, 1859.
Batho, William, Amesbury; Nov. 13, 1860.
Bickerdike, James Bird, York; Feb. 23, 1860.
Callender, William, Hamshaugh; Dec. 19, 1856.
Clarke, Alfred Frederick Strafford, Gordon-square; Nov. 15, 1860.
Ford, Branthwayte Beevor, Longton; Nov. 15, 1860.
France, William Henry, Sheffield; Aug. 2, 1860.
Paine, William, Exeter; April 18, 1860.
Roberts, John, Crûz, Carnarvon; April 4, 1859.
Whitehead, Thomas, London; Oct. 6, 1848.
Young, Edward Parker, Delamere-crescent; Nov. 15, 1860.
Young, Henry James, Bath; Jan. 21, 1859.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on

Thursday, Dec. 13th, 1860.

Caskie, John Boyd, Largs, Ayrshire, N. B.
Curtis, Albert, Staines, Middlesex.
May, Henry, Birmingham.
Nicholas, Ebenezer, Market Deeping.
Schollick, Thomas James, Ulverston, Lancashire.
Walton, Brinsley Marcius, Hurstpierpoint, Sussex.
Wrixon, Robert, Devonshire-terrace, Camden-town.

The following gentlemen also on the same day passed their first examination:—

Howarth, George, Southport, Lancashire.
Kilburn, John E., West Auckland, Durham.
Maling, Edward Allen, Sunderland.
Williams, Edward Humphery, Carnarvon, N. W.

APPOINTMENTS.—Mr. Alfred James Harrison, M.R.C.S., L.S.A., was appointed Resident Medical Officer to the Public Dispensary, Carey-street, Lincoln's-inn, at a meeting of the committee of governors held at the Dispensary on the 11th inst.

Mr. J. Patton Hemphill, A.B., M.R.C.S., has been appointed Surgeon-Accoucheur to the Ladies' Charity, Liverpool, in the room of the late Dr. Gilmour.

QUEEN'S COLLEGE, BIRMINGHAM.—The distribution of prizes to the students of this College took place on Wednesday, the 12th inst., the Earl of Lichfield, Principal, presiding. The noble Principal, after expressing the pleasure he felt in fulfilling the duty, at once proceeded to distribute the prizes as follows:—*Anatomy:* J. C. Compson, Moseley, medal; J. Edwards, Moseley, certificate.—*Physiology:* J. Hatchett, Ravenstone, medal. — *Demonstrations:* J. Hatchett, Ravenstone, medal; T. Thompson, Thirsk, certificate.—*Medicine:* R. Norris, Northfield, medal; J. Hatchett, Ravenstone, and T. Thompson,

Thirsk (equal), certificate.—*Surgery:* R. Norris, Northfield, medal; S. Smith, Coseley, and T. Thompson, Thirsk (equal), certificate.—*Midwifery:* J. Hatchett, Ravenstone, medal.—*Forensic Medicine:* W. H. Baddeley, Wellington, medal; G. G. H. Cumming, Birmingham, certificate.—*Chemistry:* C. Adcock, Birmingham, medal; G. L. Carreg, Isle of Man, certificate.—*Materia Medica:* G. L. Carreg, Isle of Man, medal; J. R. Dowman, London, certificate.—*Botany:* C. Adcock, Birmingham, medal.—*Webster French Prize:* H. Bath, Glastonbury, books.—*O'Flanagan French Prize:* W. H. Robinson, books.—*Mathematics:* Henderson (second year), first certificate; Lloyd (first year), first certificate.—*Warneford Theological Scholars:* Ellis, Child, Busbragh, and Espin. Each recipient, on going up to receive his prize, was loudly applauded by his fellow students. After a few words from the Principal on the prosperous condition of the College, and on the zeal evidenced by the students, the meeting adjourned.

THE STOMACH OF LONDON.—The appetite of London consumes every year 371,000 oxen, 30,000 calves, 1,500,000 sheep, and 30,000 swine.

SUICIDE AND INFANCY.—The grand jury at Warwick, this week, threw out a bill against Isabella Horton, whose age was stated in the calendar at eleven years, for an attempt at *self-murder!*

MUCH GOOD FROM AN ILL WIND.—The sum of 25,634 fl., given to Baron Von Eynatter by Dr. Richter, the principal director of the Credit Bank of Vienna, is, by the recent sentence, to be forfeited, and given to the eleemosynary fund of Vienna.

THE TURKISH BATH MOVEMENT.—A prospectus has been issued of the London and Provincial Turkish Bath Company, with a capital of £100,000 in shares of £5 each.

DEATH OF DR. JOLIT.—On Saturday, the 15th instant, a few minutes after twelve at noon, and in the vestry of the French Protestant Church, St. Martin's-le-Grand, died suddenly, at the age of seventy, Dr. Jolit, of London. Dr. Jolit had followed his profession in many parts of the East, and particularly at Malta. He subsequently returned to London, and devoted much of his time and talent to the relief of the French Protestant poor, by whom he was much beloved.

THE ADULTERATION OF BREAD WITH ALUM.—Five bakers, named Ratcliffe, Scholl, Verge, Lambert, and Brett, were summoned to the Wandsworth Police-court, on the 15th instant, for unlawfully using alum in the manufacture of bread. The proportions employed varied from twenty-seven to eighty grains in a quartern loaf. Mr. Ingham (magistrate) inflicted penalties of £5 and £10 each, and costs ranging from £3 5s. to £4 8s. The informations were laid by Mr. John Dart, the inspector of weights and measures for the district, under the 3rd of George IV., c. 106, in the following terms:—"That within forty-eight hours before the making of the complaint, and within ten miles of the Royal Exchange, being a person making bread for sale, he did, in the making of bread for sale within such limits, use a certain mixture and ingredient, to wit, alum, in the making of such bread, other and except as mentioned in the statute in the case made and provided." The analyst was Dr. Normandy.

PATHOLOGICAL SOCIETY OF DUBLIN.—THE LATE SIR HENRY MARSH.—At a meeting of this Society, held on the 15th inst., the President, Dr. Fleming, made the following observations preliminary to the proceedings:—

Gentlemen,—Before commencing, I cannot but feel that it would be an omission, on my part, to allow the present opportunity to pass without some allusion to the cause of the adjournment of our last meeting. It was to me, under the distressing circumstances, somewhat consolatory that the first act of my presidency should have been to place this Society in the initiative of paying that memorial tribute to one of its former presidents, to whom it was so eminently due. The interval which has since elapsed has afforded me an opportunity of reflecting on his past labours in the special department of the profession with which this Society is identified; and receiving from him as a pupil my earliest professional instructions, subsequently actively engaged with him in many of his clinical researches, and ultimately placed in the position of estimating the value of his unwearied exertions in the cause of his profession, I have no hesitation in marking the late Sir Henry Marsh as the most prominent, the most efficient, and the most zealous physician of that day in the pursuit and investigation of pathological knowledge, and in its proper adaptation to clinical study. Upon this solid basis, constructed by himself, he secured the ladder of his professional life, and advancing step by step, with a steadiness and a rapidity rarely equalled, he raised himself to a height as elevated as it was merited, and retained his exalted position with unswerving firmness throughout a long and protracted career. In the list of those members of this Society who have the high honour of being its originators, the name of the late Sir Henry Marsh will be found enrolled. He warmly co-operated with them in its establishment, and contributed to its proceedings, and with them he had the gratification of witnessing its progressive growth, until it reached its present full maturity, stamping upon Irish medicine and upon Irish surgery a celebrity universally acknowledged, and conferring benefits on society at large beyond appreciation as to their value. Here, gentlemen, the brief outline of that portion of the life of the late Sir Henry Marsh, which can be said legitimately to fall within my province, as President of this Society, must end. Its limits have necessarily been restricted: I leave to others to extend them. The task will not be found very difficult, as, amongst social attributes, high moral rectitude, unflinching integrity, and virtues of the first order, stand out in bold relief; whilst amongst the professional can justly be tableted those which characterize the eminent and the accomplished physician.

HEALTH OF SCOTLAND.—In reporting the number of births, deaths, and marriages in the month of November in the eight principal towns of Scotland, the Registrar-General states that scarlatina has been epidemic in all the towns, and in Greenock assumed the diphtheritic form; the 14 deaths in that town in the month classed under the head of scarlatina were all from diphtheria, and all but one were those of children under five years of age. The conjoined mortality of scarlatina and diphtheria during the month, in the eight towns (with an estimated population of 908,646, not a third of that of this metropolis), amounted to 237. Altogether, zymotic (epidemic and contagious) diseases proved fatal to 619 persons, constituting 30 per cent. of the mortality; in Dundee no less than 54 per cent., in consequence of the extreme mortality there from small-pox, scarlatina, and croup; but the Registrar-General is able to report that small-pox was rapidly abating in all the towns except Perth and Dundee. One of the local registrars for Dundee states that "the poor Irish seldom or never call in a doctor for small-pox or measles, believing medical aid to be of no avail in these diseases." Very nearly half the deaths in the eight towns (957, or 47 per cent. of the whole 2011) were under five years of age; in Dundee no less than 58 per cent., and in Greenock 59, or in round numbers three of every five deaths. The mean temperature of six of the towns from which returns were made was 39·3°, which is 2·3° below the average. The highest and lowest readings of the thermometer were at Paisley 54·5° and 18°, but the mean daily range at Paisley was only 11·1°. Although Glasgow, Paisley, Greenock, and Edinburgh differ little in latitude, the thermometer at the first two fell as low as 19° and 18°, while at the last two it was not below 26·5° and 28·7°.

Births, Marriages, and Deaths.

BIRTHS.

On the 13th inst., at Canonbury-street, Canonbury, the wife of Archibald Simpson, M.D., of a daughter.

On the 13th inst., at Norland-terrace, Notting-hill, the wife of Henry W. Hubbard, Esq., M.R.C.S., of a daughter.

On the 13th inst., at Great Malvern, the wife of T. Rayner, M.D., of a son.

MARRIAGES.

On the 15th inst., at St. Paul's, Camden-square, Albert Curtis, Esq., M.R.C.S., of Staines, Middlesex, to Maria, younger daughter of Wm. Braund, Esq. of St. Paul's-road, Camden-square.

On the 15th inst., at Holy Trinity Church, Colchester, Vere Webb, Esq., Staff-Surgeon, to Fanny Elizabeth, youngest daughter of the late Peter Duncan, Esq., of Regent's-park.

DEATHS.

On the 1st inst., at Sussex-terrace, Old Brompton, the wife of Alex. Burn, M.D., Surgeon-Major, Bombay Army.

On the 6th inst., at Cleobury Mortimer, Salop, Richard Nugent, L.R.C.P.I., F.R.C.S.E., aged 42.

On the 9th inst., at Lympstone, near Exeter, J. B. Falconer Atwell, Esq., M.R.C.S., aged 27.

MEDICAL DIARY OF THE WEEK.

MONDAY, DEC. 24 .....
- ROYAL FREE HOSPITAL.—Operations, 2 P.M.
- METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

TUESDAY, DEC. 25 .....
- GUY'S HOSPITAL.—Operations, 1½ P.M.
- WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEDNESDAY, DEC. 26
- MIDDLESEX HOSPITAL.—Operations, 1 P.M.
- ST. MARY'S HOSPITAL.—Operations, 1 P.M.
- UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
- ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

THURSDAY, DEC. 27 ...
- ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
- CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
- LONDON HOSPITAL.—Operations, 1½ P.M.
- GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M.

FRIDAY, DEC. 28 .....
- WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.

SATURDAY, DEC. 29 ...
- ST. THOMAS'S HOSPITAL.—Operations, 1 P.M.
- ST. BARTHOLOMEW'S HOSPITAL.—Operations 1½ P.M.
- KING'S COLLEGE HOSPITAL.—Operations, 1½
- CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

To Correspondents.

E. S.—According to the provisions of the Medical Witnesses Act (5 and 7 Wm. IV., cap. 80, sect. 5), when an inquest is held on the body of any person who has died in any public hospital or infirmary, whether the same be supported by endowments or by voluntary subscriptions, nothing entitles the medical officer, whose duty it may have been to attend the deceased person as a medical officer of such institution, to any fee or remuneration for evidence before the coroner.

A Subscriber (Worcester) shall receive a private note, containing the information he requires.

S. H. S.—No intelligence upon the point has yet been given to the profession. If our correspondent will address us again in the course of a month, we shall be able to answer his question.

Mr. John Burry, (Manchester.)—We know nothing of the person named.

DR. COPLAND.

To the Editor of THE LANCET.

SIR,—I am sure the suggestions of Dr. Pettigrew, published in your last week's impression, to do honour to Dr. Copland, can be received by the profession with only one feeling, that of cordial concurrence and hearty determination to see the object worthily and satisfactorily carried out.

Who that has ever looked, cursorily even, at that stupendous work, "The Medical Dictionary," can fail to have been struck with the amount of anxious, patient, and persevering mental toil and physical exhaustion represented in its thousands of closely-printed pages! Thirty-two long years did this "Samuel Johnson of medical literature," as Dr. Copland has been aptly styled, devote to the accomplishment of this Herculean task, at a sacrifice of professional gain, personal ease, and social enjoyment, rarely, if ever, surpassed by any literary man.

Looking at these facts in connexion with Dr. Pettigrew's proposition, I venture to submit to the profession and the public that at the banquet to be given to Dr. Copland there should be some more tangible and permanent mark of appreciation presented to him. I would also suggest that the friends and admirers of Dr. Copland on the Continent and in America, as well as in England, Scotland, and Ireland, should have the opportunity afforded them of participating in this honourable and gratifying undertaking.

I am, Sir, your obedient servant,

December, 1860. MEDICUS.

Mr. S. L. Gill.—We have received no report of the case, nor can we find any account in the newspapers.

Vexatus.—Under such circumstances he would be exempt.

Delta.—The letter would have been inserted, but the opinion of the Attorney-General for Ireland, published in our columns this week, would seem to settle the question.

University.—Simply A.B., M.D.

Young Subscriber.—1. It is impossible to say when the regulations will be made.—2. Probably.

Mr. Charles Prentice.—We cannot continue the discussion on the reduction of hernia.

THE MEDICAL ACT.

To the Editor of THE LANCET.

SIR,—It is clear that this precious Medical Act is a complete failure as regards affording any protection to duly qualified medical men. The only thing it has succeeded in has been to extract money from all our pockets on false pretences. My intention is to request that my name be expunged from the future Register. It is clearly unnecessary for the purpose of remaining a legal practitioner to have it retained, and to continue to be enrolled is only to keep up a most atrocious imposture upon the medical profession.

I remain, Sir, yours, &c.,

December, 1860. M.D. AND PHYSICIAN.

Justitia has an undoubted claim upon the husband. It is simply absurd to say the contract was broken by "Justitia." If such a plea were to be admitted in a court of justice, no professional man would be safe. We do not recommend an appeal to the law, under ordinary circumstances; but it is due to the profession that in this particular instance the party should be made to feel that his refusal to pay is contrary, not only to honour and propriety, but also to law.

Mr. William Elliott Porter.—The question has already been sufficiently discussed in the pages of THE LANCET.

Quidam.—The case of "Sarcina Ventriculi, with Vomiting of Biliary Calculi," shall appear in an early number of the next volume. We shall be happy to receive the other communications, if short.

S. A. R.—The subject is noticed in another part of our journal.

THE LATE CASE OF CESAREAN SECTION.

To the Editor of THE LANCET.

SIR,—I am the Dr. Giles mentioned in *The Times* paragraph on the late case of Cæsarean section; and as you have inserted an Obstetrical Fellow's comments on the said paragraph, I claim to state, through your influential columns, that its appearance in *The Times* was not, so far as I know, the act of the medical gentlemen. As to the paragraph itself, opinions might differ. Your correspondent calls it "a puff." Allow me to ask for his definition of *a puff*. Does a bare statement of fact come under this term? If so, *The Times* is a puff, and so is the paragraph, though it applies no eulogy, not even the adverb "skilfully," to the performance. I guess that your correspondent would call anything to the credit of his neighbour "a puff." His objection to the word "successful" need not be discussed, as I saw the woman this morning (tenth day) lying on the sofa, almost as well as any ordinary patient, suckling her child, and, despite her cancer, likely to get about again.

I must pay Dr. Edmunds a tribute of admiration for his calm and dextrous performance of the operation, as well as for his indefatigable attention to her since.

I am, Sir, yours obediently,

WM. GILES, L.R.C.P. Edin.

East India-road, Limehouse, Dec. 19th, 1860.

*** We are happy to insert Dr. Giles' letter. He must, however, be aware that the paragraph in *The Times*, which we repeat is a puff, described the case as "successful" on the day following the operation—surely a little premature in a scientific point of view, however it may astonish the readers of a newspaper. Dr. Giles affirms that, "*as far as he knows*, the appearance of the paragraph was not the act of the medical gentlemen." Has he put the question to his colleagues? Our observations are entirely confined to the reprehensible practice of sending medical communications to the general press. In the absence of all those details which professional men look for, we have no opinion to offer upon the scientific merits of the case.—ED. L.

Hospital Surgeon.—Such advertisements are scarcely consistent with the position which a surgeon to an hospital is expected to maintain. If, however, he condescends to address the public through the medium of a newspaper, he must be content with being placed in the company of persons of a very questionable character.

If *Mr. T. Turner* will inform us where a private note can reach him, he shall be communicated with.

A Militia Surgeon (Edinburgh) will perceive by a letter in this day's LANCET that the statement is contradicted.

Not a Medical Student.—There would be much difficulty in carrying out such an arrangement.

Dr. W. Pirrie, (Aberdeen.)—The proofs were posted on Monday in time for the evening mails. The parcel, therefore, should have reached Dr. Pirrie on Tuesday.

THE QUESTION OF TITLES.

To the Editor of THE LANCET.

SIR,—In reference to your correspondent's letter, signed "A Doctor of Physic," perhaps you will allow me to state that the titles "Doctor of Physic" and "Doctor of Medicine" are identical. In fact, Doctor of Physic, translated into the Latin language, is *Medicinæ Doctor*, for which the initial letters M.D. stand. I beg leave also to refer your readers to the recently published opinion of the Right Hon. her Majesty's Attorney-General for Ireland, confirming the right of the Dublin Licentiates to the title of M.D. Assuredly, according to all legal authority, rule, and precedent, as well as the equalizing effect of the Medical Act, the London and Edinburgh Licentiates possess an equal right. The recorded decisions of Coke, Ellenborough, Mansfield, and Denman, and the more recently delivered judgment of the Lord Chief Baron of the Exchequer, establish such a right. I shall therefore subscribe myself

Your obedient servant,

China-terrace, December, 1860. J. E. SMITH, M.D.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. C. J. Hare; Mr. E. Hughes; Mr. S. L. Gill; Dr. Burke; Mr. J. Tanner; Mr. W. E. H. Porter; Mr. T. Turner; Mr. Hemphill; Mr. Solly; Mr. C. L. Edwards; Mr. C. Swaby Smith, Barbage; Dr. M. W. Fisher; Mr. Ikin; Dr. Walker; Dr. Corfe; Dr. Macleod; Dr. Hillier; Dr. Charles Taylor; Dr. MacCormack, Southsea; Mr. Hulke; Mr. A. Coleman; Dr. C. D. Arnott, Gerlestone; Dr. E. Bishop, Devonport; Mr. Mercer, Wadhurst, (with enclosure;) Mr. A. Weston, Brackley; Mr. A. Bell, Waterford, (with enclosure;) Mr. J. A. Harding, (with enclosure;) Mr. G. H. Crosby, (with enclosure;) Mr. J. Witchell, (with enclosure;) Mr. R. P. Tickler, (with enclosure;) Dr. Barker, Bedford; Mr. A. G. Bolls, (with enclosure;) Mr. N. Moore, Sheffield, (with enclosure;) Mr. J. P. Berryman; Mr. R. Baker, Biddenden, (with enclosure;) Mr. Atwell Lymstone, Exeter; D. C. D., (with enclosure;) A Licentiate of the Royal College of Physicians; Quidam; A Physician, Surgeon, and Apothecary; University; A Subscriber; Not a Medical Student; Delta; Royal Institution; Justitia; Hospital Surgeon; &c. &c.